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ABSTRACT

A detailed descriptive analysis of both the direct and indirect costs incurred by the Federal government in operating the ERIC system, and the user population and user demand for ERIC products and services, this study is based on data gathered from a number of complementary sources. These sources included a survey of ERIC's U.S. intermediate "access points" (academic and public libraries, information centers, clearinghouses); cost data drawn from site visits and archival budgetary materials; surveys of ERIC requestors intended to provide user profiles as well as measures of user satisfaction; and a survey of educational practitioners, administrators, and researchers designed to measure awareness and use of ERIC. A generalized conceptual framework within which to view the operation of a system such as ERIC is developed, ERIC access points are described by type and function, and ERIC usage is examined with respect to demand levels and products and services utilized. The costs of the ERIC system are categorized by ERIC system participant, system products and services, and system functions. Recommendations for further analysis are made. The seven appendices, all concerned with study methodology, include copies of the survey instruments, and 55 tables and 8 figures summarize the data. (JL)

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August 1981

COST AND USAGE STUDY
OF THE
EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)
SYSTEM.

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The opinions and conclusions presented in this report are those of the contractor and do not necessarily represent the opinions, conclusions, or policies of the National Institute of Education.

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NIE, ERIC Clearinghouse, and ERIC contractor staff were generous in sharing information about their operations with us. In particular, Bob Chesley, Chuck Hoover, and Frank Smardak were always available for our (interminable!) questioning. They and members of their staff were open and willing to share with us not only the financial details of ERIC but also its history. Ted Brandhorst supplied us with details about the ERIC Processing and Reference Facility. Jack Veale and staff helped by explaining EDRS operations and supplying document order data for analysis and sampling. All the Clearinghouses participated by supplying details of their operations; we are especially grateful to those we visited who took time to detail their operational and accounting procedures. Other access points also gave generously of their time and experience in onsite interviews related to cost data collection.

We would be remiss if we were not to acknowledge the conceptual and practical input provided by earlier ERIC studies. In particular, we would like to acknowledge the work of Syracuse University and Indiana University.

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Dennis D. McDonald, Ph.D.
Project Director

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SECTION 1

STUDY OBJECTIVES

The primary objective of this study can be stated very briefly: to describe the cost and usage of the ERIC system.

By "cost" we mean the direct and indirect costs incurred by the Federal Government and other ERIC system participants in (1) operating the ERIC system and (2) providing access to and using the information which it produces and distributes. By "usage" we mean the description of the individuals whose requests for ERIC information products and services are satisfied in whole or in part by the variety of intermediary organizations which provide access to ERIC. In addition, the description of usage includes an estimate of the annual demand for ERIC products and services as well as a description of the purposes for which ERIC information is sought as well as overall awareness of and satisfaction with ERIC.

The method used to accomplish this objective has been to develop a multi-faceted database which has been used to prepare the quantitative description of the ERIC system which is presented in this report. More importantly, the data sources described in this report and in its appendices are designed to be used by NIE in the future for its own internal research and development purposes.

To the best of our knowledge, these data constitute the most thorough description of a Federal information system of ERIC's type which has ever been attempted. The development of this description has required the development of an overall conceptual model of the ERIC system in terms of its participants, functions, uses, and costs.

We have employed a variety of data collection and analysis procedures during the course of the study. All emphasize the development of quantitative measurements which can be projected to an annual basis for the entire system. These collection and analysis procedures include:

- The development and implementation of a sample survey of ERIC's U.S. intermediary "access points", based upon a complex probabilistic multi-list sample (see pages 38-86)

- The collection of cost data through a series of site visits and examination of archival budget data, following a predetermined framework emphasizing the disaggregation of costs by system participant, function, and product or service (see pgs.138-16

- Surveys of ERIC requestors with the goal of obtaining descriptions of users as well as measures of their satisfaction with and use of ERIC (see pages 109-137)

- A sample survey of educational practitioners, administrators, and researchers throughout the United States, designed to measure awareness and use of ERIC (see pages 93-108)

All the data derived from the sample surveys conducted during the course of the study have been delivered to NIE on computer tape. File descriptions, questionnaires, and sampling weights are documented in the appendices. It is our hope that these data and this report will be a valuable research resource for ERIC and NIE in the coming years.

SECTION 2

CONCEPTUAL FRAMEWORK

The purpose of the following sections is to present a general framework for describing the ERIC system. First we show that the basis for the ERIC system is the transmission of information to users. Initially we refer to this information as "messages" since both requests for information as well as documents and other responses are transmitted and delivered by the ERIC system. Next we classify the products and services currently provided by ERIC as primary, secondary, and tertiary. Primary information is that which reports original research or other substantive knowledge. Secondary information is that which directs one to find other primary information. Tertiary information is primary and secondary information which has been processed, synthesized, or analyzed, as in a state-of-the-art literature review.

Next we describe a generic model of the ERIC system in which the major participants are users, intermediaries, the ERIC system proper, and document providers. These major classes of participants are the ones who are involved in the transmission of message-bearing documents over various times and distances from information generators to information users. Then we describe the functions performed by the ERIC system participants, and the measurement of costs associated with these functions. Finally we present a framework for identifying the issues as a context in which users of this report can interpret the study's findings.

2.1 Message Transmission

Describing message transmission involves describing the message itself and the way it is transmitted. Relevant variables are: (1) message initiator, (2) message recipient, (3) message format, (4) transmission channel, (5) level of specificity, (6) purpose of request, (7) level of analysis, (8) message content, (9) resource expenditure, and (10) speed of transmission. Each of these variables is relevant to both the cost and usage of the ERIC system.

Any of the ERIC system participants can be message initiators or message recipients. Message format refers to the physical form in which the message is embodied; possible values for this variable are print on paper (e.g., technical report, RIE issue, etc.), microform, person-to-person conversation, digital or analog electronic representation, etc. Transmission channel refers to the manner in which a particular message format is communicated between participants, e.g., face-to-face, telephone lines, U.S. Postal Service, satellite transmission, etc. Level of specificity relates primarily to the level of specificity of requests submitted to ERIC, e.g., whether the requestor wants a specific document or piece of information or a general overview of an ill-defined topic area (such as the classic request type, "Give me everything you have on topic X"). Purpose of request also relates to purpose of use and implies the area in which the sought information will be applied. Examples of this are to develop teaching skills, to help write a paper, to prepare a speech, to plan a program, etc. Level of analysis refers to the "degree of customization" involved in responding to a user's request. It is closely related to level of specificity. The more analysis required to understand a user's request (e.g., a lengthy reference interview) or the more analysis required in putting together a response (e.g., pulling together data from various sources and synthesizing it, as in an information analysis product) the more expensive a response to a request will be (other things being equal).

Message content can be described in various ways, chief among them being the subject orientation of the message, such as curriculum development, application to higher education, mathematics, test score analysis, etc. A more general description of subject content can also be developed in terms of "process", "content", and "human" variables, as described in Developing a Sensing Network for Information Needs in Education (Stanford University, Institute for Communication Research, 1972). Resource expenditure can be described by referring to the time and money expended by system participants in sending and receiving messages. Finally, speed of transmission refers to the delay between transmission and receipt of messages and can be measured in units ranging up to weeks and months.

As mentioned above, each of these variables is relevant to both cost and usage. Table 2.1 suggests some of the possible relationships in terms of the ERIC system. We note that these are only suggestions. But the objective here is to demonstrate the possible role such variables might play in describing the ERIC system. And it should be noted that the relationship between cost and usage measures are in several areas very closely linked. For example, the information analysis functions performed by ERIC Clearinghouses are designed to facilitate the use of information produced by workers often operating in unrelated areas. Yet such analysis functions add significant costs to the ERIC system due to the required input of subject expertise. Since the development of information analysis products is one way to promote diffusion of educational innovation, one might conceivably ask the question of whether uses of such products are commensurate with the costs to ERIC involved in producing them?

In the actual series of studies performed during the course of this project, data to exhaustively describe all of these variables was not collected. We know, for example, that from the user's standpoint it is often difficult to separate the format of a message from its delivery channel. And it is also true that being too specific about message content, as in over-specifying the contents of a reference question, can actually reduce the utility of an information product by reducing the probability of serendipitous discovery. But understanding how and why messages are transmitted among ERIC participants is important if improvements are to be introduced in the future.

2.2 ERIC Products and Services

ERIC provides a wide range of products and services which are used by ERIC itself, by intermediaries, and by requestors. An extensive listing of ERIC products and services, presented by source, was developed by the ERIC Clearinghouse on Information Resources in their Special Project Report on the Design of ERIC Usage Studies (Volume I, Syracuse University School of Education). Another useful classification of products and services is by type of information, that is, primary, secondary and tertiary. The Syracuse listing is reordered under these headings in Table 2.2.

Table 2.1 Possible Relevance of Message Transmission Variables to Costs and Usage of ERIC System

Message Transmission Variable	Relevance to Cost Analysis	Relevance to Usage Analysis
1. Message initiator	System features can reduce costs of initiating requests.	Requestor may be more likely to use info. he/she has personally requested.
2. Message recipient	Some user groups are more expensive to serve than others.	Initial recipient may not be end user.
3. Message format	Physical format affects cost of reproduction, storage, etc.	Some formats are easier to use than others.
4. Transmission channel	Some channels are more expensive than others.	User may prefer conventional channels.
5. Level of specificity	Increasing the request's specificity reduces the cost to understand it.	Some users need help in articulating their requests.
6. Purpose of request	More important requests may have more resources expended on responding to them.	How products are used may impact future development
7. Level of analysis	As information is processed preparation costs increase.	Pre-synthesized information may be easier to apply in practical situations.
8. Message content	Responses to popular requests can be pre-packaged.	Products with the wrong content can be useless.
9. Resource expenditure	Value of participant time may far exceed dollar expenditures.	Requestors may be more likely to use information for which they pay.
10. Speed of transmission	Some requestors may be willing to pay more for quick service.	Requestors may be working under tight deadlines.

SOURCE: King Research, Inc., ERIC Cost and Usage Study, 1981.

Table 2.2 ERIC Products and Services

Primary Products	Secondary Products	Tertiary Products	Services
Microfiche of RIE item (EDRS) - (on subscription, monthly and back collection, on demand)	CIJE - subscription (monthly, semiannually, accumulation)	Information Analysis Products	Software System to Search ERIC Online and Batch (ORBIT, COSMOS, DIALOG, BRS, etc.)
Hard Copy of RIE items (EDRS) on demand	RIE - subscription (monthly issues and annual, semiannual index)	Insturctional Media Package	Order ERIC (on SDC/ORBIT)
ERIC - What It Is	ERIC tapes - subscription (ERIC/Facility)		Telephone Inquiries
ERIC Processing Manual (ED 092 164)	Descriptor and Identifier Usage Report		Mail Inquiries
ERIC Training Manuals - Media on ERIC Display on ERIC	ERIC Information Analysis Products (1967-72)		Workshops at Professional Meetings
	Institutional Sources in ERIC		Linkages to Professional Organizations
	Reading/Project Number Index, Cumulative		Computer Searches
	Title Index		Training Workshops
	Educational Documents Abstract		Reference Assistance
	Education Documents Index Institutions (1966-71)		Computer-based ERIC Searches
	Clearinghouse # to ED # Cross Reference List		ERIC Training/Instruction/Orientation
	Contract/Grant Number Index		Referral Services (to CHs, Facility, etc.)
	Journal Columns		Fiche reading equipment-circulation, inhouse use
	Clearinghouse Search Catalogs		Fiche copying equipment
	Clearinghouse Newsletters		Fiche printing equipment
	Promotional Brochures		Order MF/HC from EDRS
	ERIC Data Base Directory (Facility)		
	ERIC Microfiche Collection Directory (Facility)		
	Thesaurus of ERIC Descriptors		

Adapted from: Design of ERIC Usage Studies: Volume I. Syracuse University, 1979.

As noted previously, primary and secondary products are differentiated, the first being providers of information, with the latter being providers of information about information. Tertiary products are those which have been generated through the analysis and review of other primary and secondary products. Finally, the services listed down the right-hand column of Table 2.2 are processes or technologies which are provided or required for obtaining access to ERIC information products. These vary according to the amount of control which ERIC has over their use. As we will show in the following sections, these services (and products) also differ according to the ERIC system participant involved in providing access to them.

We should note here that the distinction among primary, secondary, and tertiary products is really a distinction made on the basis of intended function. ERIC intends, for example, its Information Analysis Products to function as media for reviewing and synthesizing existing information; sometimes this is done in order to help bridge the gap between theoretical knowledge (perhaps generated by an academic researcher) and practical knowledge (perhaps needed by a guidance counselor). We observe that it is also quite likely that a substantial number of RIE- and CIJE-accessed items other than IAP's will also function in this manner. Many educational journals, for example, regularly publish review articles, and these might logically be classified as performing a "tertiary" function. Such concerns argue for making distinctions of usage on the basis of not only type of document but also on the basis of manner or purpose of use.

For the purposes of this study, we have collapsed ERIC products and services into four major categories: RIE, CIJE, ERIC searches, and ERIC documents (of all types).

2.3 Generic Model of ERIC System Participants and their Interactions

In the previous sections we described message transmission and ERIC products and services. Here we present a conceptual model of the interaction among system participants involved in requesting and receiving these products and services. Four generic types of system participants are displayed in Figure 2.1:

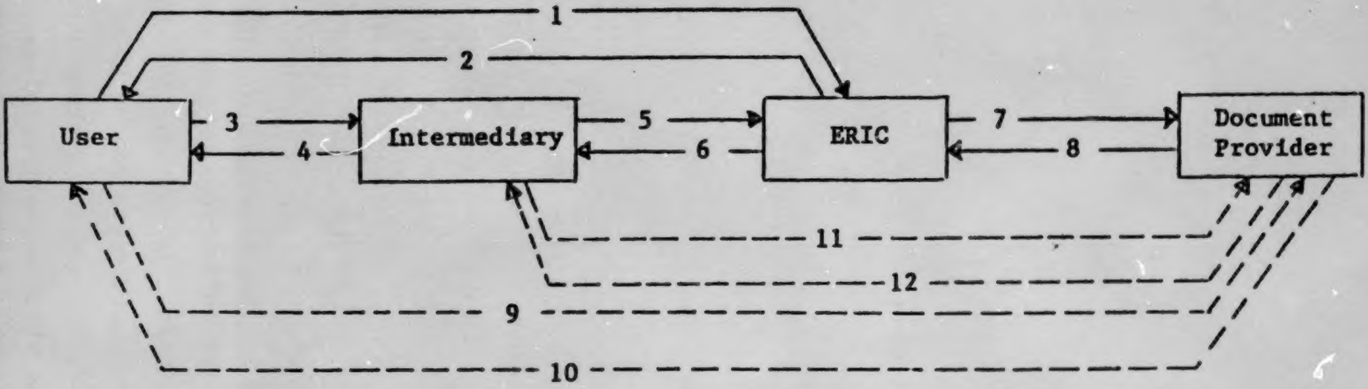
1. Users
2. Intermediaries
3. ERIC
4. Document Providers

Users are individuals who originate or cause to be originated requests for information. Users can generally be classified as potential users (individuals who, because of their employment situation or personal interests, are a potential market for ERIC products and services) or actual users (known recipients of ERIC products and services).

Intermediaries are the individuals or organizations which transmit, often with some processing or analysis, requests for information from users to a component of the ERIC system. These intermediaries may be professional information personnel, such as reference librarians employed by standing order customers. Or they may be colleagues of the requestor or opinion leaders/gatekeepers who are by nature of their personality or job function particularly attuned to numerous information sources, among them ERIC. Or they may be intermediary organizations such as database search services.

ERIC itself refers to any product, service, individual or organization produced by or under financial or managerial control of ERIC. Included are the Facility, EDRS, RIE, CIJE, and their publishers, the individual clearinghouses (which also function as intermediaries), ERIC documents (primary, secondary, and tertiary), and the collections of ERIC documents maintained by standing order customers and others. In general, ERIC components are of two types: those with direct contact with users and document providers (such as clearinghouse user service personnel and the documents which requestors received), and those components which support services provided to requestors and document providers (such as Central ERIC, the Facility, and Oryx Press).

Figure 2.1 Generic Model of the ERIC System


1
2
User
3
4
Intermediary
5
6
ERIC
7
8
Document Provider
11
12
9
10

SOURCE: King Research, Inc., ERIC Cost and Usage Study, 1981

Document providers, in its strictest interpretation, refers to the authors and creators of the primary products (e.g., research reports, journal articles) and tertiary products (e.g., information analysis products) input to the ERIC system. (It is our understanding that all secondary product input, such as document abstracting and indexing, is under the direct control and operation by ERIC components.) More broadly, "document providers" also refers to the publishers of the reports, books, and articles which are included in or referred to by the ERIC system. Examples of this latter group are academic presses and academic departments, state and local education agencies, commercial publishers, and professional societies.

The lines with arrows in Figure 2.1 represent the two-way interactions which can occur among the system participants. The solid lines represent the interactions which are of most direct relevance to ERIC system operation. These interactions have path numbers 1, 2, 3, 4, 5, 6, 7, and 8. The dotted lines represent the interaction among system participants which are characteristic of more general communication paths; these are numbered 9, 10, 11, and 12.

Paths 1 and 2 represent direct contact between requestors and ERIC. This occurs when a requestor, for example, telephones an information request directly to an ERIC Clearinghouse. Another example of paths 3 and 4 is an educator ordering a document directly from EDRS.

Paths 3 and 4 represent the user accessing the ERIC system through an intermediary, such as asking a reference librarian employed by a standing order customer how to use the ERIC Thesaurus.

Paths 5 and 6 represent the interactions between intermediaries and ERIC. These interactions may occur on-site (e.g., a library clerk retrieving an ERIC microfiche from a standing order microfiche collection) or on a remote basis (e.g., a media center staff member performing an online literature search of the ERIC database). Another dimension is that these interactions may occur in real time (e.g., a professor's research assistant talks via long-distance telephone with clearinghouse staff) or in a delayed mode (a microfiche is requested by and transmitted to a librarian by EDRS via the U.S. Postal Service).

Paths 7 and 8 represent the acquisition of documents by ERIC for inclusion of the bibliographic reference and/or the document itself in the system. These documents may be solicited or unsolicited (as in the course of ERIC Clearinghouses' acquisition process) or they may be actually contracted for (as in the development of some information analysis products).

Paths 9 and 10, as shown in Figure 2.1, appear to be loops outside the ERIC system. They occur when the user goes directly to the provider or originator of a document, as when a teacher purchases a textbook direct from a publisher. Another example is when one researcher asks another for a journal article reprint rather than use an intermediary service such as a library.

Paths 11 and 12 represent the intermediaries' bypassing the ERIC system. This can occur whether or not the requestor's needed information is within the province of ERIC. Of course, intermediaries (such as libraries) regularly bypass the ERIC system in developing their own collections, and this need not be considered as a limitation of ERIC given the extremely broad nature of available information resources.

Costs and usage related to paths 9, 10, 11, and 12 are not of direct relevance to this study other than their capacity to help us understand the costs and usage associated with the other paths.

As in any information system, the user is of paramount concern. It is in terms of benefit to the user that the existence of an information system is ultimately justified. As is the case with many information systems, however, the role of the intermediary (both individual and organizational) is also of key importance. If we define the goal of an information system as the linking of information users with information generators and/or the information they generate, the kinds of information (and their media and delivery channels) will, to a great degree, determine the roles, functions, and ultimately, the need for intermediaries.

ERIC is an information system relying greatly upon intermediary individuals and organizations for physical access to and delivery of information. It relies heavily upon intermediaries to convert the expressed or unexpressed needs of potential users into "actionable" demands upon the system. This is true for all four of the key ERIC product categories upon which this study concentrated.

First, Resources in Education (RIE) is a monthly abstract journal which provides individuals with intellectual access to the literature acquired and selected by ERIC Clearinghouses. As is the case with most printed indexing and abstracting services, few, if any, individuals subscribe to it, even though its annual subscription price is comparable with many scholarly research journals in other fields of research. Instead, its subscribership is composed primarily of libraries and other organizations whose primary function is the provision of information services. While this is not unusual for abstracting and indexing services, ERIC is unique in the field of education since RIE is linked through its ED numbers to the ERIC documents, many collections of which exist locally throughout the United States. This linking, however, practically guarantees users' dependence upon the services of an intermediary since only organizations can afford to purchase ERIC document collections.

A somewhat similar situation exists for Current Index to Journals in Education (CIJE). CIJE provides monthly indexing of the journal literature in education. Again, its subscribers are primarily organizations such as libraries. And again, user dependence upon intermediaries is practically guaranteed since only libraries are likely to maintain backfiles of the journal issues indexed in CIJE.

Another reason for user dependence on intermediaries is the technology involved. Few individuals have microfiche readers while microfiche readers and reader printers are stock items for organizations which maintain ERIC microfiche collections. (This restriction is partially overcome by the direct sale of ERIC documents through the ERIC Document Reproduction Service. Nevertheless, requestors must still obtain ordering information and must identify the individual document before ordering, functions which are often performed by intermediaries.)

Finally, searching the ERIC bibliographic database is a function most often performed by intermediaries who have the required equipment (computer terminal), materials (such as an ERIC thesaurus), and training and experience. In general, most computerized bibliographic searches are conducted by intermediaries, so ERIC is not unusual in this regard.

Intentionally or unintentionally, then, the ERIC system, broadly defined, has taken its current shape not only because of its overall goal of educational information dissemination but also because of the methods it has developed for marketing, packaging, and distributing its information resources. Its overall effectiveness as an information system, as a result, cannot be viewed only in relation to the value or utility of the information it provides. Instead, the systems which have been developed for distributing this information must also be considered as has been done in this study.

This heavy reliance upon the performance of ERIC's intermediary "access points" has a variety of present and potential impacts. We will touch on four of them here:

Lack of Centralized Control

First, ERIC has no financial or administrative control over the vast majority of its intermediary access points. It cannot directly manipulate local financial conditions, training and marketing activities, and the provision of user support services. In short, the overall effectiveness of ERIC as an information dissemination system is, to a great degree, outside its own direct control.

Need to Consider the Whole System

Second, this dependence upon intermediaries has several implications for system evaluation and performance measurement. The most important of these is that any measurement of satisfaction with ERIC information products must take into account not only the user's perspective but also the delivery channel itself and the purpose for which the information thus obtained is utilized.

Effect of Changes on the Entire System

Third, ERIC's heavy reliance upon intermediary access points will have an impact on any changes it wants to make in how it supports NIE's education dissemination activities. Any changes in technology or even in pricing schemes might be accepted or rejected based on how well these changes fit into ongoing information programs. For example, online bibliographic searching fits well into ongoing library operations since it is partly an extension and automation of traditional information services. Other technologies may not fit so well. As another example, this study demonstrates that a substantial amount of time and money is already being spent by intermediary access points on providing access to ERIC products and services. ERIC is provided, however, as only one of a large number of information resources available for potential users. Thus, if ERIC were, for example, to raise its prices to help offset its own front-end costs, it might find its access points unable to pass this price increase on to their users since few, if any, make direct charges for many of their most basic information services.

Ability to Bypass Intermediaries in Providing Services

Fourth, the current overall structure of the ERIC system is due, to a large part as indicated above, to the types of technology and media upon which ERIC products and services are based. Newer technologies may, if they are "friendly" enough, attempt to bypass the intermediary access points. We are not prepared to say whether this is a valid objective, since such a decision can only be made by NIE. Nevertheless, a decision to bypass ERIC's intermediary access points should not be made with the hope that technology will necessarily provide the way. The traditions built up around the ERIC systems may be difficult to overcome, with or without the introduction of new technology.

We emphasize that these above concerns are not peculiar to ERIC. Most information services which are document-based are affected to a greater or lesser degree by all of them. Commercial publishers of educational or reference materials operate under similar pressures, as do the providers of information products and services used by scientists and engineers. ERIC may be unique, however, in that it combines print, microform, and computer technology within a complexly interacting combination of agencies and organizations. And, it does so within a professional field, education, which has long been characterized by conservatism.

2.4 System Functions

An important perspective on the ERIC system is provided by study of the functions performed. This unit of analysis complements consideration of system participants and system products and services; together the three differentiate most of the areas of interest in proposed and potential analysis.

We have identified six functions performed in the ERIC system. These were derived from review of system functions used in other applications, of the activities performed specifically by ERIC, and of the requirements of the anticipated data collection and subsequent evaluations. They are as follows:

1. Generation
2. Reproduction and Distribution
3. Acquisition and Storage
4. User Support
5. Identification and Access
6. Assimilation

Generally a functional specification represents the grouping of all activities performed within a system's boundaries. Activities which are functionally similar are grouped together under a single functional heading, with each activity being assigned to one and only one function. There is a tradeoff in the development of a functional specification concerning level of detail; very specific functions are unwieldy in both data collection and analysis while too generic functions may mask important contrasts in the system. For the ERIC system, the fairly broad set of functions identified above are further broken down as required.

The first function, Generation, involves the creation of the acticles, reports, indexes, and so on included in the ERIC system. Included are both the intellectual development of the information and the initial recording of that information. The generation function covers all ERIC information products, including primary, secondary and tertiary products, and also generation of other primary literature covered by RIE and CIJE but not distributed by ERIC.

Reproduction and Distribution refers to the production of copies of the generated literature and to its initial distribution through a variety of channels. Essentially this is a publishing-like operation. Reproduction and distribution of all three categories of information products (primary, secondary, and tertiary) involves paper copies; primary and tertiary publications may also be distributed on microfiche and secondary information via computer tapes and online systems. Distribution of material within the ERIC system may be automatic, as with the standing order service, or on demand.

Acquisition and Storage represents activities at the receiving end of the distribution channel, and is primarily a library function. Included in this function is processing done by a library on the ERIC publications, including cataloging. In addition to libraries, ERIC itself acquires and stores materials, as when a clearinghouse acquires reports or journals for processing. Individuals also acquire and store ERIC system materials, generally for their own use.

User Support encompasses the activities of providers, ERIC, or intermediaries in assisting users. A major user support activity is reference assistance, a second is the provision of computer-based searches. Referring to the listing of ERIC products and services in Section 2.2, the services provided can generally be considered as falling under the User Support function. Products associated with user support, such as promotional brochures, follow the same functional trail as other types of products, with the user support function associated with these being referral of the user to the product.

The two user-performed functions are Identification and Access and Assimilation. Identification and Access, which may be performed either by a user or an intermediary, includes finding out about a particular item, determining its physical location, and obtaining a copy. These steps may be combined, as when a journal article is found via browsing in an individual's subscription copy, or may be separate, as when a report is identified through a bibliography, located in a library catalog, and then accessed. Assimilation is also a composite function which includes user activities of reading and then assimilating information.

The major units of volume involved in the ERIC system functions are items produced (Generation, Reproduction and Distribution), items distributed (Reproduction and Distribution, Acquisition and Storage) and item uses (User Support, Identification and Access, Assimilation). The relationships among these measures of volume, on a system and an individual item basis, is a complex issue which lies at the core of Information Science. The functions defined for ERIC differentiate among the three measures of volume and indicate the linkages, providing the basis for complex modelling of their relationships.

Within the ERIC system, functions are generally performed in the specified order, although not all functions may be performed in all cases. A sequence of activities, however, may repeat the list of functions more than once. One example of this is in the provision of report copies by ERIC. An initial cycle through the functions would involve authorship of the reports, its distribution by the document provider, and acquisition by ERIC. The functions are then repeated as ERIC processes and reproduces the report and makes it available to additional users.

Further examples of this cycling effect relate to the distinction between primary and secondary information, where the latter is used to identify the former. Both primary and secondary products go through quite similar activities which can be seen as functionally equivalent, and so the functions presented earlier can be used in either case. For some purposes, however, it is useful to differentiate functions by level of information and participant.

Generation is primarily the responsibility of document providers (primary and tertiary information) and ERIC (secondary information). ERIC and its intermediaries are chiefly responsible for Reproduction and Distribution, Acquisition and Storage, and User Support. Users are primarily responsible for Identification and Access, and Assimilation.

Each function is performed for each type of information. For primary materials, Generation usually takes place outside of ERIC with the authorship of reports, journal articles, and so on. Reproduction and Distribution may take place through ERIC or through the document provider. Additional functions are performed as described above. The functions presented for secondary products differ somewhat from those for the primary literature, with Generation represented by Abstracting and Indexing and Data Base Generation and Acquisition and Storage including Search Service Acquisition and Storage. Secondary information may be made available in either printed or computer-readable form; in the latter case, search services perform additional functions in making the information accessible for use. Functions shown for tertiary products closely parallel those for primary products, with the main distinction being the generating source of ERIC for some tertiary products.

2.5 Measures of Cost

The development of costs associated with the ERIC system are based on the system description presented earlier in this report. This means that costs identified represent those activities performed by identified participants within the scope of the system as it has been defined.

The first step in the development of cost data was the expansion of the ERIC system functions into more specific activities performed. For each activity, the participants and products and services involved were specified, and the activity defined by indicating associated inputs, processes and outputs. Also identified were other factors affecting costs, such as level of indexing or type of reproduction method used. This activity listing was used to generate, in turn, a list of costs to be identified.

The major question which arose as these lists were generated was the level of specificity to be considered. A number of factors impacted upon this, and it was clear that the level of specificity varied among different parts of the system. A driving force in determining level of specificity were the issues to be addressed, as discussed in the next section. Some of these issues require systemwide costs; others suggest that information on very specific activities is appropriate.

A constraint on cost data collection is imposed by the relative availability of various cost items. Costs reflected in ERIC expenditures can be identified and broken down by participant and broad functional categories. Here the question was the effort involved in deriving allocation formulas to make finer distinctions. In the use area, collection of cost data (primarily expressed as time spent combined with salaries) was closely tied to original collection of use data. Other costs outside ERIC generally come from the relevant participants, with widely varying levels of difficulty. Throughout, there is a question of the level of precision required and the methods necessary to obtain that level.

2.6 ERIC Information Issues and their Implications for Interpreting This Study's Findings

2.6.1 A Framework for Identifying Issues

This section deals with information issues that might be addressed by NIE, ERIC, and others who use this report. These issues are grouped by those involving ERIC information related policies, planning and operations as shown in Figure 2.2.

We consider ERIC information policies as being general terms and conditions under which the ERIC system operates. These terms and conditions are subdivided into three sets of policy statements. The first set involves a broad mission statement such as, "the ERIC information system is to support and enhance education at all levels in the United States". The second set of policies includes goals of the ERIC system in support of the mission. Such goals might include broad statements concerning what educational communities should be served, by what information, through what information products and services, and by what means. The third set of policies deals with guiding principles that should be considered throughout planning and in operations. Such guiding principles might include such areas as funding levels, governance, pricing (or cost recovery), use of Federal and non-Federal resources, and adherence to Federal regulations and laws.

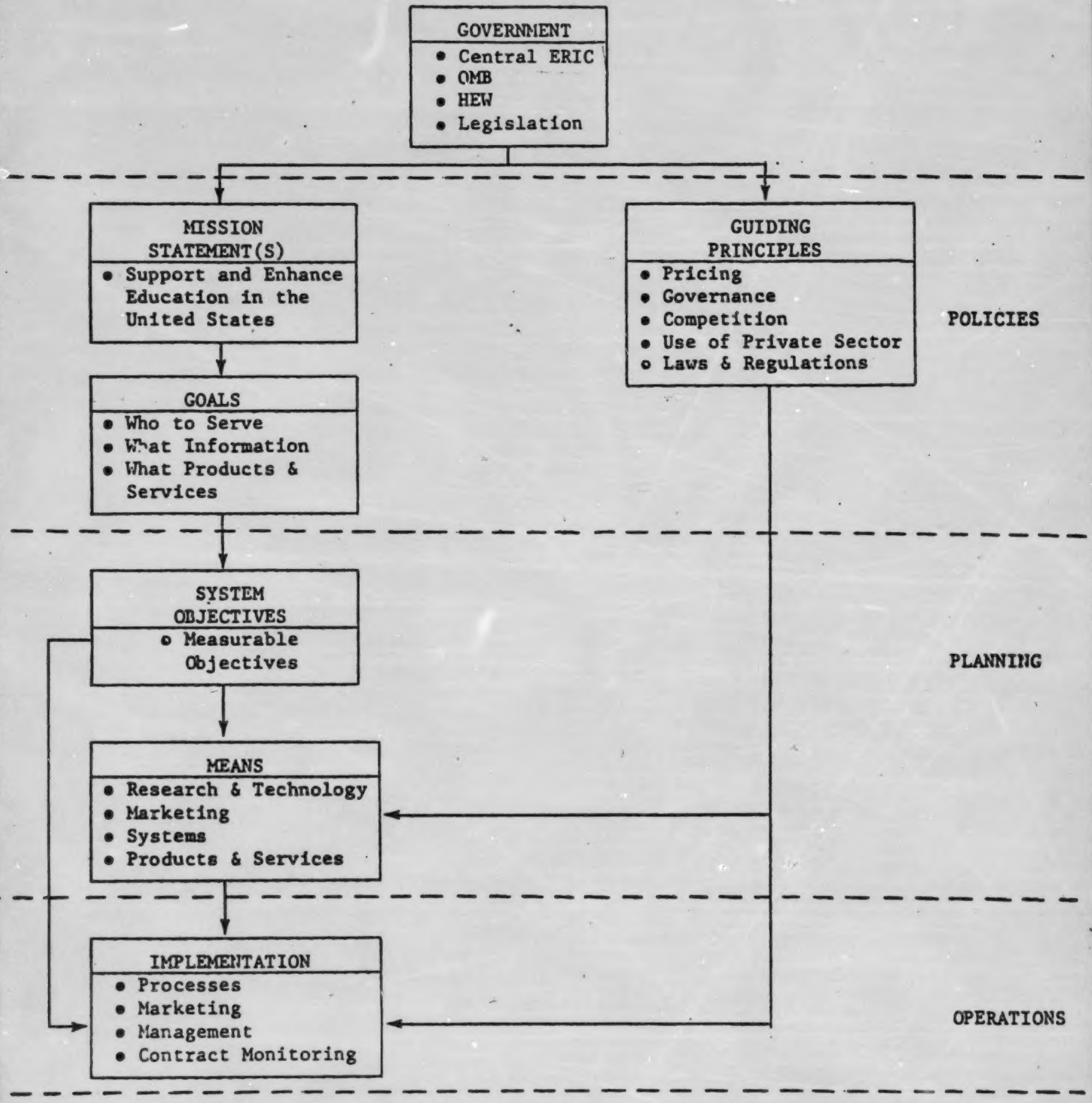

GOVERNMENT
• Central ERIC
• OMB
• HEW
• Legislation
MISSION STATEMENT(S)
• Support and Enhance Education in the United States
GUIDING PRINCIPLES
• Pricing
• Governance
• Competition
• Use of Private Sector
o Laws & Regulations
POLICIES
GOALS
• Who to Serve
• What Information
• What Products & Services
SYSTEM OBJECTIVES
o Measurable Objectives
PLANNING
MEANS
• Research & Technology
• Marketing
• Systems
• Products & Services
IMPLEMENTATION
• Processes
• Marketing
• Management
• Contract Monitoring
OPERATIONS

Figure 2.2 ERIC Information Policies,
Planning and Operations

The second group of issues involves ERIC information system planning. Under the ERIC information system goals should be a set of objectives stated in measurable terms. For example, an objective might be that all elementary teachers should have access to information about new approaches to handling specific classroom situations. One can measure their awareness of such information, the availability of such information and use of it. Planning then involves setting forth the means of achieving the ERIC information system objectives in the future. Issues involved in planning include such things as the use of research, new technology, and marketing. Planning issues also concern employment of new products and services, participation of clearinghouses, systems, and organizational structure. Finally, the planning must take into account the guiding principles such as pricing, funding, governance and so on.

The next set of issues deals with operational considerations such as the specific implementations of plans or operational specification. Issues could be directed to contract monitoring of adherence to budgets, achievements of specified objectives, determination of productivity or performance, quality control of performance, and so on. These issues can be sub-divided by functions or activities performed or by information products produced or services provided. Implementation should also be considered in terms of the ERIC information policies (i.e. system mission, goals and guiding principles).

Below issues are associated with each of the boxes in Figure 2.2. Each issue is stated in the form of a question. Some general considerations and implications are also identified with these issues. It is found that the implications frequently vary depending on the type of information product or service involved (i.e. primary, secondary or tertiary; function or activities performed and participant involved in performing them; and the users served). Finally some ways are presented in which cost or usage data (or models) can assist in addressing the policy, planning and operational issues.

2.6.2 ERIC Information System Policy Issues

What is the ERIC Information System Mission?

The mission of ERIC seems to be to serve education in the U.S. as stated above. This mission appears to be much broader than the mission of some other Federal information systems that are oriented toward (1) processing and distributing information collected under Federal funding (e.g., government sponsored research information and data by NTIS and GPO; census data by U.S. Census; weather data by NOAA; cartographic information by DOI, NASA, DOA, etc.) or (2) processing and distributing information to organizations funded by an agency (e.g., DOE, DOA, NASA, etc.).

Whom Should the ERIC System Serve?

There are several distinct educational communities that might be served. These can be classified by the educational function performed such as teaching, research, counselling, administration, funding, and so on. Another dimension might be educational levels or subject areas such as elementary, secondary and higher education or English, linguistics and reading. Also, it has been pointed out that there are constantly emerging fields of education that can be served by ERIC.

What Information Should be Provided to Appropriate User Communities?

There seem to be three basic ways in which the type of information is classified. The first dimension concerns the subject matter and this is classified generally by the ERIC thesaurus. The second dimension could involve the source of information including government sponsored or not, original information or not (i.e. tertiary) and type of organization source (i.e. university, government, private sector, etc.). The third dimension concerns the "quality" of information. Generally, refereed journal articles, for example, are considered to be of higher quality than research reports and other types of the fugitive literature. Implications of the type of information provided to users obviously depends on what user communities are being served, the value of the information, products and services employed, cost and so on.

ERIC and others are discussed by the GAO report (1979) in terms of the "overlap" of coverage of secondary information. On the other hand, it has been argued that abstracting and indexing must be done with the specific user community involved. Duplicate coverage of primary information might be a concern as well. For example, there are instances in which it is possible for a report to be processed by a grantee or contractor, the sponsoring agency, ERIC, GPO and NTIS. A counter argument is that each participant has a relationship with a unique part of the overall user community and that part would not be served otherwise.

There are other implications for the source of information dimension. It has been stated that one responsibility of government sponsored research, in addition to generation of primary information, is the reproduction and distribution or publication of that research. Whether information generated from other sources should be processed depends on the stated mission, user community served, value of the information to that community, and cost. The value of information to that community also depends on the quality of the information. The Rand report (Greenwood and Weiler, 1973) indicates that the general quality of educational research and information is low and, therefore, affects the ERIC system. The research is said to be generally conflicting, too theoretical and frequently nonverifiable.

What Information Products and Services Should be Provided?

Once broad statements are made concerning what user communities to serve and what kind of information to provide them, a question remains concerning what information products and services should be provided. The principal types of information products or services currently in ERIC include media that carry primary information messages (e.g., books or monographs, journals, technical reports, nonprint media, numeric databases, etc.); media that carry secondary information that is used to identify or locate primary information (e.g., published indexes and abstracts and catalogs, computer bibliographic searches and SDI, computer data searches, bibliographic databases, bibliographies, referral services, etc.); and tertiary products and services that result from original analysis from or correlation of primary information messages (e.g., reviews, analysis, technical consulting or counselling, etc.; provision of this latter set of services is a hallmark of information clearinghouses, as noted by Applied Management Science and Cuadra Associates, 1981). There are other dimensions of types of information products or services provided by ERIC but these enter directly into other policy, planning and operational issues discussed below.

What Should be the Governance of ERIC?

A number of studies discuss the governance of ERIC; particularly with regard to the relationship of ERIC central, the clearinghouses, the host organizations and the related professional organizations. The Rand report previously cited suggests that, from among seven models, there are three that might be applied to ERIC. The first model is one that would consolidate the existing clearinghouses into about eight with an additional one devoted exclusively to new educational concepts. A second model would distinguish clearinghouse domains by educational functions concerned with either classroom instruction or instruction and support. A third model is a combination of the above models, but includes a regional dimension as well. In this model, there would be a functional set of clearinghouses to acquire, review and synthesize the research and practitioner literature. In addition, there would be a regional network of clearinghouses to service the information needs of practitioners and researchers through an assorted chain of information centers or teacher renewal centers. There are many implications to alternative governance of the ERIC system including the sources of income (i.e. Federal funding, user charges, host organization contributions, etc.) and control of these funds; management strengths; relative size of staffs; and lines of communication and control.

Should Information be Provided Free? If Not, What Should be the Basis for Charging?

Some guiding principles have been set forth concerning this issue. The OMB Circular A-25 (titled "User Charges") is addressed to this issue, although a GAO report (1979) indicates that the overall Federal policy is unclear and broadly interpreted.[1] Generally, the Circular states that information products and services should be priced to recover their costs. There is a question of what costs should be included, such as generation, reproduction, distribution, developmental, set-up, overhead, or direct. There are several other broader bases for user charges including objectives of pricing, type of information involved, and who the purchasers are or what users are served.

Implications of user charges are that such charges result in some diminished amount of use of information and, therefore, some benefit to society is presumably lost. On the other hand, it is argued that giving information away free can, and probably will, result in frivolous requests for the information. We have pointed out (King and Roderer, 1978) that information is never

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[1] Since these documents were written, the Federal Government has shown increased interest in user charges for information services.

"free" to users because they incur costs in requesting, receiving, reviewing, maintaining and using the information. Thus, the latter case is not a particularly strong one. In all cases, there are unique price and demand (use) relationships that must be considered. The demand for some products and services is insensitive to price; whereas, the demand for many is highly sensitive to price.

One basis for determining price is the organizational objective involved. Such objectives might include recovering costs (as implied by the OMB Circular), to make a profit, to encourage use of an information product or service, or to encourage purchase by a specific audience. Recovering costs and achieving a profit are clear. An example of encouraging use of an information product or service might be to price microform low and paperform high to encourage purchase of the former (or vice versa). Lower prices might be extended to communities of users who have fewer resources for purchasing information, or that are funded by the Federal Government. (There is currently sentiment to charge non-U.S. users more.)

It might be that user charges should be different for primary, secondary and tertiary information products and services. The value of all three types of information is ultimately achieved through use of primary information messages. Thus, the three should be priced to achieve as much use of primary information as the user community will bear. In some instances, this may involve low prices on primary information products and services, and in other instances, it could involve low prices on secondary information products and services, if identification and location of the primary literature is a problem.

The pricing policy might also depend on the type of the initial purchaser. For example, libraries serve multiple users and, therefore, might be candidates for higher prices. The GAO report (1979) criticized ERIC because they charge Lockheed (and others) a minimal amount for bibliographic computer tapes that they process. A figure of $660 was quoted. This compares to an order of magnitude of $50,000 charged for National Library of Medicine tapes. Either general policy might be correct depending on the subsequent value derived from the use of the information and what the effect would be of passing initial costs of producing information on the tapes on to the online searchers.

It is anticipated that substantial consideration will be given in the near future to the user charge issue by OMB and others. This cost and usage study can be employed to anticipate the effect of various interpretations of OMB Circular A-26 and its subsequent amendments. The cost study should establish the unit cost of all alternatives of user charges based on cost recovery at various levels. The usage study should establish amount of use at current levels of user charges (including none). We can hypothesize what effect increases or decreases in user charges would have on amount of usage. Current value can be inferred from extent of use and purpose of use of primary and tertiary information. Current value of secondary information products and services can be inferred from searches that lead to use of primary information.

To What Extent Should Non-Federal Organizations be Used in the ERIC System?

Some guiding principles are provided by OMB Circular A-76. This Circular implies that the Federal Government should not compete with non-Federal organizations (i.e. the private sector). Furthermore, it is suggested that non-Federal organizations should be employed for processing, if they are less expensive than performing the work in-house. Again, there is some difficulty in the former instance in determining whether an information product or service is in direct competition with another one. For example, is a microform product in competition with a paperform product? Is a published bibliography in competition with a current titles product? One could argue that all information products and services sold to libraries are in competition for their limited budgets. Our cost and usage studies can be somewhat helpful in describing the current ERIC system. Alternative interpretations of Circular A-76 can be assess by hypothesizing their effect on cost and usage.

What Federal Laws and Regulations Apply to ERIC?

There are potential implications for the ERIC system in Privacy Laws and the Freedom of Information Act. Also, the Federal Communication Commission is contemplating new communication regulations that could have substantial effect on line charges and, hence, use of ERIC online bibliographic information.

The Postal Service rate structure and regulations can also affect the cost and usage of ERIC information products and services. If such changes are contemplated, Central ERIC can apply our cost and usage data to hypothesize the effects of such changes.

2.6.3 ERIC Information System Planning Issues

We indicated above that planning can and should be addressed to measurable system objectives. It is here that our cost and usage study should be of particular importance since current descriptions of cost, flow of funds, flow of materials, and usage can serve as baseline measures upon which the objectives and future plans can be compared. The objectives should be specific statements concerning system goals. The system planning processes should be addressed to means of achieving the ERIC system mission, goals and objectives. Issues addressed to planning involve research, technology, new product or service development, marketing strategies, and system structure; all in view of guiding principles. These issues are discussed briefly below.

What Research Should be Performed by ERIC?

This is a difficult issue when making a distinction between basic and applied research. The amount of Federal support of basic information research has declined dramatically in the past decade. The two principal agencies engaged in such research are the National Science Foundation and the National Library of Medicine. What little applied research that is supported is now performed largely in agencies such as NIE and ERIC. It might be that ERIC should attempt to have some input into the NSF and NLM basic research programs or at least be thoroughly aware of what is taking place. Applied research, such as this ERIC Cost and Usage Study, should be directed at specific measurable objectives.

What New Technology Should be Developed or Adapted by ERIC?

Nearly all information technology employed by ERIC and other similar systems was developed outside their environments for other purposes or for mass markets. This probably will continue to be true, so that new technology developments should be monitored to establish their potential use in meeting system objectives. Such potential technology might be in online user/system interfaces, telecommunication (e.g., facsimile transmission, satellites, optic fiber, videodiscs, intelligent terminals, voice synthesizers, etc.), micro or minicomputer use in libraries and in schools at all levels, word processing, and so one.

What New Information Products and Services Might be Developed for ERIC?

ERIC is currently operating on a very tight budget and, therefore, is able to provide a limited number of types of information products and services. However, under increased budgets or by reallocating the current budget, a range of alternative information products and services might be provided. Such new products or services can be identified by successful use in other systems or by marketing research. The usage study might be employed to establish the current types of information products or services that might warrant further promotion (due to lack of awareness), modification, or deletion.

What is an Optimum ERIC System Structure?

Above, we indicated some suggested models for structuring the ERIC system. Any planning for future structure must be directed toward meeting specific objectives which can be partially stated in terms of cost, amount of use and purpose of use. There are other social and political aspects as well as the guiding principles that must be considered.

2.6.4 ERIC Information System Operational Issues

Issues involving ERIC system operations are those that are directed toward implementation of means of achieving the mission, goals and objectives in light of guiding principles mentioned previously. The operational issues concern contract monitoring in terms of such things as system performance, productivity and quality control. They also involve specifics of marketing or public relations, pricing tactics and other operational considerations. Other than observing current cost per sale or cost per use, much of the detail necessary to monitor clearinghouse, facility or other organization activities, is out of scope of the cost and usage study which is focussed on system-level issues. Our goal has been to provide data to help clarify the policy and planning issues of most interest to NIE in order that NIE can eventually make its own operational decisions based on the system-level data we provide.

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SECTION 3

CONVENTIONS USED IN WRITING THIS REPORT

The reader should note the following in order to be able to interpret data tables in this study which have been generated from the various sample surveys.

Usually the individual row and column headings of a table which is generated from survey data will give the name of the variable as it appears in the computerized data file. For example, for the Access Point Screener Survey questionnaire, which is displayed in Appendix B, the following conventions are used:

Q6P3C	Section 6, question 6.3, part C
Q2P4	Section 2, question 2.4

Variables which are created from the individual questionnaire responses from recoding, sorting, or computation are usually identified by an assigned name. The variables created from the Access Point Screener Survey which are used most often are the following:

RIESUB	Takes a value of 1 if the access point subscribes to the monthly or semi-annual edition of Resources in Education (RIE)
CIJESUB	Takes a value of 1 if the access point subscribes to the monthly or semi-annual editions of Current Index to Journals in Education (CIJE)
ERICFICH	Takes a value of 1 if the access point maintains an ERIC microfiche collection
ERICDOC	Takes a value of 1 if the access point maintains an ERIC microfiche or papercopy document collection

ERICSRCH	Takes a value of 1 if the access point conducts or makes arrangements for online or batch searches of the ERIC bibliographic data base
ONLINE	Takes a value of 1 if the access point conducts only online searches of the ERIC bibliographic data base

Each table identifies the particular source of data presented in the table. Additional created variables are described in the appendices of this report.

SECTION 4

DESCRIPTION OF THE STUDY

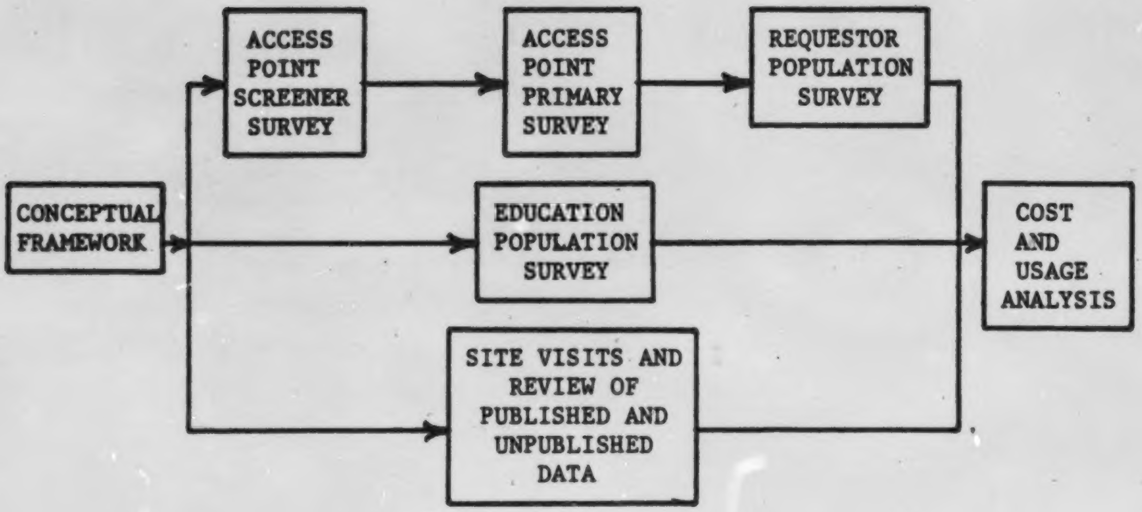
Figure 4.1 demonstrates the relationships among the components of the ERIC Cost and Usage Study.

The Access Point Screener Survey was a survey of U.S. organizations. It was designed to collect data on the types of ERIC products and services offered in the U.S., the types and number of organizations (or "access points") which provide them, and estimates of the use of RIE, CIJE, ERIC documents, and ERIC searches. With a sample mail-out of 1,063, we received a response of 541 during the survey period of October 1980 through February 1981. Based on these responses, we estimated that, in 1980, there were 3,269 organizations, or access points, in the U.S. which provided access to RIE, CIJE, ERIC computer serches, or ERIC documents. Questionnaires and survey procedures are described in Appendix B.

As part of the Access Point Screener Survey, sampled access points were asked to volunteer to collect data (names, addresses, etc.) on ERIC users, whom we referred to as "requestors". Altogether, 249 access points initially agreed to participate in the Access Point Primary Survey by filling out "Request Cards" during assigned sample periods. Altogether, 168 access points actually participated by supplying 2,628 Request Cards during the period January 1981 through May 1981. This survey is described in Appendix C.

From the Request Cards we collected during the Primary Survey, we developed the sample for the Requestor Population Survey. The purpose of this survey was to follow up individual requestors to ask them how they used ERIC products and services and whether or not they were satisfied. Out of a sample of 1,000 mailed out during May 1981, we received 535 back by the July cut-off date. When these questionnaires were keypunched, they were matched together in a single database with the Request Card used to generate the sample. This survey is described in Appendix D.

Figure 4.1 Components of the ERIC Cost and Usage Study


CONCEPTUAL FRAMEWORK
ACCESS POINT SCREENER SURVEY
ACCESS POINT PRIMARY SURVEY
REQUESTOR POPULATION SURVEY
EDUCATION POPULATION SURVEY
SITE VISITS AND REVIEW OF PUBLISHED AND UNPUBLISHED DATA
COST AND USAGE ANALYSIS

Finally, we conducted by mail the Education Population Survey. Of 1,000 questionnaires mailed out on April 14, 1981, 376 were returned. The puspose of this survey was to measure the awareness and use of ERIC among educators in general. The sample for this survey was divided into Education Practitioners, Administrators, and Academicians and Researchers, and was developed from existing mailing lists of U.S. educators. This survey is described in Appendix E.

In order to collect detailed statistics which could not be collected via the various mail survey questionnaires, King Research conducted a series of site visits with ERIC Clearinghouses, ERIC search services, and other access points. In addition, budget and contract data provided by the Central ERIC administration, as well as internal documents provided by ERIC Clearinghouses and other organizations, were also reviewed. Appendix A describes this component of the study.

Data from all these efforts were combined in a final analysis of ERIC costs and usage, the results of which are presented in this report.

SECTION 5

DESCRIPTION OF ERIC ACCESS POINTS

The purpose of this section of the report is to provide numeric descriptions of the population of ERIC access points in the United States, as of 1980. The data presented here are derived from the Access Point Screener Survey.

5.1 Types of Access Points

One of the goals of the Access Point Screener Survey was to determine what types of U.S. organizations provide access to ERIC products and services. We defined an "access point" as an organization which does one or more of the following:

- Subscribes to one or more copies of the monthly or semi-annual editions of Resources in Education (RIE) or Current Index to Journals in Education (CIJE)
- Conducts or makes arrangements for online or batch searches of the ERIC bibliographic database
- Maintains a collection of ERIC documents in microfiche or papercopy format

Access points were asked to categorize their organizations, and in doing so, distinguish among the various organizational levels which can be responsible for ERIC. Respondents were asked to adhere to the following definitions of organizational levels:

> Your Organization - The organizational unit or department which is responsible for maintaining and/or providing access to ERIC products or services (e.g., a college or university library, a school district's central media resources center, a state education agency's information resource center, etc.). This questionnaire should be completed from the perspective of this organizational unit or department.
>
> Parent Organization - The larger organization in which your organization is administratively situated (e.g., a university or university department, a research center, a state agency, an intermediate service agency, a school district, etc.).
>
> Other Organizations - Organizations other than your own organization or parent organization (e.g., other colleges, universities, school districts, companies, or state agencies, etc.).

Accordingly, it was possible (and desirable) for separate organizations from within the same parent organization to be classified as different access points and thus to be counted separately. This can happen, for example, when organizationally separate libraries on the same campus, or different departments within a state education agency, each provides access to ERIC. These distinctions were made as far as is possible in sampling and were also retained during the calculations of the sampling weights to project the survey responses to a U.S. population total.

We present a detailed breakdown of U.S. ERIC access points by type of organization in Table 5.1. As you can see, the ERIC Clearinghouses and ERIC Facility account for about one-half of one percent of the 3,269 access points. Academic Access Points account for slightly less than 53% of the total, and Other Access Points for almost 47% of the total. (These major categories are also displayed in Figure 5.1.)

Another breakdown of the ERIC access points by type of access point is displayed in Table 5.2 which shows how many access points of each of the major types provide each of the major ERIC product or service categories.

Approximately 83% have RIE, 43% have CIJE, 22% conduct ERIC searches, and 43% have ERIC document collections. (These sum to more than 100% since some access points provide more than one product or service.)

Based on the above data, we can state the following about ERIC access points in the U.S.:

1. While the majority (53%) of access points are associated with academic institutions, a substantial proportion (nearly 47%) are associated with other types of organizations, such as school districts and public libraries, which operate at the local or community level.

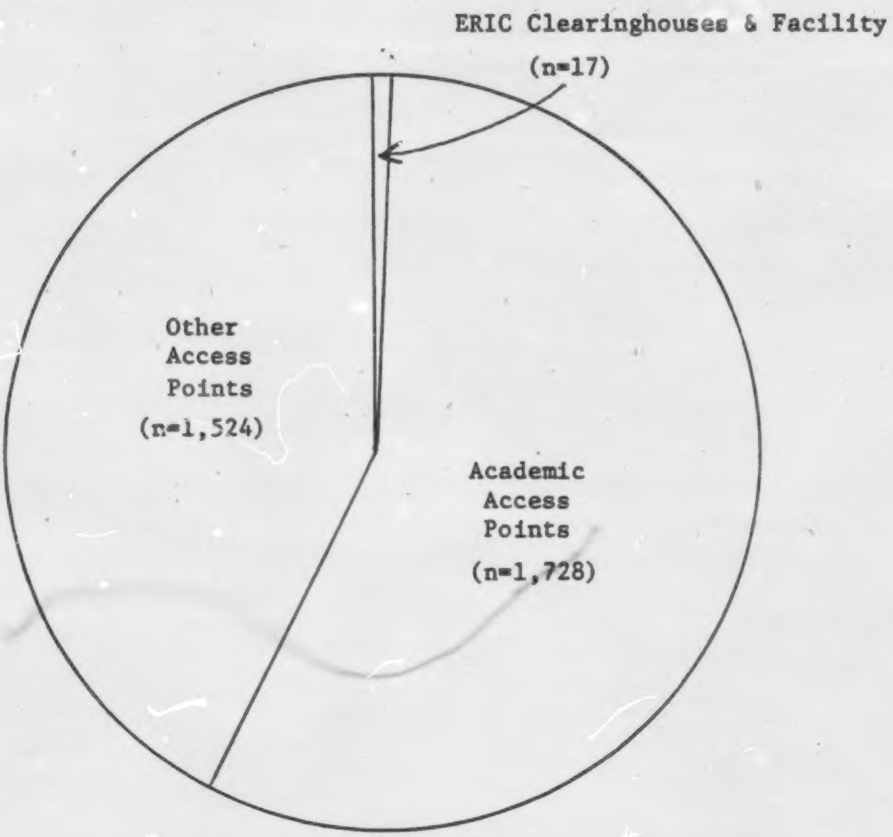
2. By far, the most widely distributed ERIC product is Resources in Education (RIE); approximately 83% of the total 3,269 access points subscribe to one or more copies of the monthly or semi-annual edition.

Table 5.1. Number of U.S. ERIC Access Points by Type of Access Point

Type of Organization		Number of ERIC Access Points	
(NEWTYPE2)	(NEWTYPE1)	n	%
1. ERIC Clearinghouses & Facility	1. ERIC Clearinghouses	16	0.5
	2. ERIC Facility	1	0.0
	(Subtotal)	(17)	(0.5)
2. Academic Access Points	3. Campus-Main Library	1,500	45.9
	4. Campus-Departmental Library	155	4.8
	5. Campus-Other Organization	73	2.2
	(Subtotal)	(1,728)	(52.9)
3. Other Access Points	6. State Education Agencies	67	2.0
	7. State Libraries	4	0.1
	8. Federal Libraries	57	1.7
	9. Other Federal Clearinghouses	3	0.1
	10. NIE Lab or Center	12	0.4
	11. Intermediate Service Provider	74	2.3
	12. School District R&D Center	67	2.0
	13. School Library-District Level	467	14.3
	14. School Library-Local Level	143	4.4
	15. Public Library	318	9.7
	16. Society or Association	74	2.3
	17. Business or Corporation	64	2.0
	18. Other	173	5.3
	(Subtotal)	(1,524)	(46.6)
	Column Total	3,269	100,0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

Figure 5.1. Number of U.S. ERIC Access Points by Type of Organization, 1980



SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

Table 5.2. Number of U.S. ERIC Access Points by Type of Access Point and ERIC Category

Type of Access Point (NEWTYPE2)	ERIC Category									
	Subscribes to RIE[1] (RIESUB=1)		Subscribes to CIJE[2] (CIJESUB=1)		Conducts ERIC Searches[3] (ERICSRCH=1)		ERIC Document Collection[4] (ERICDOC=1)		All Categories[5]	
	n	%	n	%	n	%	n	%	n	%
1. ERIC Clearinghouses & Facility	17	0.6%	17	1.2%	16	2.2%	17	1.2%	17	0.5%
2. Academic Access Points	1,566	57.8%	943	67.7%	512	70.0%	783	55.1%	1,728	52.9%
3. Other Access Points	1,125	41.6%	433	31.1%	203	27.8%	620	43.7%	1,524	46.6%
Column Total	2,708	100.0%	1,393	100.0%	731	100.0%	1,420	100.0%	3,269	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

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[1] Monthly or semiannual RIE

[2] Monthly or semiannual CIJE

[3] Online or batch searches

[4] Microfiche or papercopy documents

[5] n's do not sum across since some access points provide more than one ERIC category.

5.2 The Mix of ERIC Products and Services Provided by ERIC Access Points

We defined an ERIC access point as an organization which does one or more of the following:

- subscribes to one or more copies of the monthly or semiannual edition of Resources in Education (RIE)
- subscribes to one or more copies of the monthly or semiannual edition of Current Index to Journals in Education (CIJE)
- conducts or makes arrangements for online or batch searches of the ERIC bibliographic database
- maintains a collection of ERIC documents in microfiche or paper-copy format.

We estimate that in 1980, there were 3,269 separate organizations in the U.S. which satisfied at least one of the above criteria.

In order to investigate the "mix" of these products and services, we created the variable OVERLAP which was used to tabulate the number of combinations occurring for these four categories. As indicated in Table 5.3, the largest single group of access points is composed of access points which subscribe only to RIE; this group accounts for nearly one-third (29.1%, n=952) of the access points. This is followed by access points which subscribe to RIE and CIJE and maintain an ERIC document collection (11.8%), and then by access points which subscribe to RIE and maintain an ERIC document collection (11.6%). Together, these three groups account for approximately one-half (52.5%) of the 3,269 access points.

In order to examine these various possible combinations further, we created the variable OVERLAP2 which can take the following values for an access point:

1 if the access point provides only one of the four ERIC categories
2 if the access point provides only two
3 if the access point provides three
4 if the access point provides all four

Table 5.3. Ranking of ERIC Access Points by ERIC Product/Service Mix

	ERIC Product/Service Mix				Number of Access Points (OVERLAP)	
Rank	RIE (RIESUB=1)	CIJE (CIJESUB=1)	Documents (ERICDOC=1)	Searches (ERICSRCH=1)	N	%
1	x				952	29.1
2	x	x	x		386	11.8
3	x		x		380	11.6
4	x	x			378	11.6
5	x	x	x	x	343	10.5
6			x		262	8.0
7		x			176	5.4
8	x			x	119	3.6
9				x	117	3.6
10	x	x			107	3.3
11	x		x	x	43	1.3
12			x	x	3	0.1
13		x	x		3	0.1
Total	2,708	1,393	1,420	732	3,269	100.0

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

Table 5.4 displays the tabulation of this variable, broken down by type of access point.

Only 10.5 percent (approximately 343) of the 3,269 ERIC access points identified in the survey provide all four of the categories. Not surprisingly, nearly all (94.1%) of the ERIC Clearinghouses and Facility provide all four. But this group is in the minority. In fact, only about four percent of the Other Access Points provide all four of the categories.

For nearly half of all the access points (46.1%), only one ERIC product is provided and nearly two-thirds (63%) of this category is accounted for by RIE subscribers. There is also a substantial difference between the Academic Access Points and the Other Access Points in this regard. Percentage-wise, only about one-third (33.3%) of the Academic Access Points provide only one category, while nearly two-thirds (61.2%) of Other Access Points provide only one.

One possible conclusion from this is, given the substantial number of access points which provide only one product or service, there is a substantial market within the existing ERIC access points for additional ERIC products and services.

This conclusion may be premature. As shown elsewhere in this report, the number of ERIC products and services provided, as indicated by the variable OVERLAP2, increases with the annual budget of the access point. It may be that this is an entirely expected finding; the larger the budget of the access point, the more ERIC products and services it can provide. But it is also a fact that there are more "low budget" than "high budget" access points. It is possible that there are many ERIC access points whose management feels that providing one or two ERIC products or services adequately covers the educational research and information field.

Perhaps one scenario would be for ERIC management to attempt to combat this attitude and thereby convince the existing access points to purchase additional ERIC products and services. But such a scenario may not be

Table 5.4. Type of Access Point by ERIC Product/Service Mix

ERIC Product/ Service Mix[1] (OVERLAP2)	Type of Access Point (NEWTYPE2)			
	ERIC Clearing-houses & Facility (n=17)	Academic Access Points (n=1,728)	Other Access Points (n=1,524)	All Access Points (n=3,269)
Only One (n=1,508)	0.0%	33.3%	61.2%	46.1%
Only Two (n=882)	0.0	28.9	25.1	27.0
Only Three (n=536)	5.9	22.3	9.8	16.4
All Four (n=343)	94.1	15.5	3.9	10.5
Column total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

feasible in the current national fiscal environment. It may be that there is a need for an entirely new ERIC product, one which is designed to provide access to a broad variety of educational literature to organizations which can only afford---psychologically and/or financially---to purchase one major information product in the field of education. Development of such a product would be difficult, of course, due to the large number of sub-specialtias which are generally referred to as the field of "education". It may be wise for ERIC to consider the development of an information system which combines all the storage and retrieval advantages of the variety of print, microform, and digital technology now employed, possibly via some combination of computer and video disc technology.

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[1] "Mix" refers to whether an access point does one or more of the following:
- Subscribes to RIE
- Subscribes to CIJE
- Maintains an ERIC microfiche or papercopy document collection
- Conducts online or batch searches of the ERIC bibliographic database.

5.3 Access Point Function by Type of Access Point

Because so many different types of organizations provide access to ERIC (college libraries, state education agencies, clearinghouses, research centers, etc.), we developed a set of generic function questions to identify the functions performed by ERIC access points. Responses to these questions are displayed in Table 5.5, identified as A, B, and C.

The first (A) is whether the primary function of the access point is to provide information services (e.g., documents, statistics, literature searches, answers to questions, etc.). All the Clearinghouses and the Facility responded positively to this question, 96.4 percent of the Academic Access Points responded "yes", and 93.0 percent of the Other Access Points responded "yes". Not surprisingly, only a very small percent (4.5%) of all access points responded "no" to this question.

The second question (B) asked for access points to identify their single largest group of users, identified as follows:

- Employees of or students affiliated with your organization[1] or its parent organization.[2]
- Employees of or students affiliated with other organizations.[3]
- Other.

The primary purpose of this question was to determine if organizations were serving individuals inside or outside of their organizations. This is an

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The Access Point Screener questionnaire provided these definitions:

[1] YOUR ORGANIZATION---The organizational unit or department which is responsible for maintaining and/or providing access to ERIC products or services (e.g., a college or university library, a school district's central media resources center, a state education agency's information resource center, etc.). This questionnaire should be completed from the perspective of this organizational unit or department.

[2] PARENT ORGANIZATION---The larger organization in which your organization is administratively situated (e.g., a university or university department, a research center, a state agency, an intermediate service agency, a school district, etc.).

[3] OTHER ORGANIZATIONS---Organizations other than your own organization or parent organization (e.g., other colleges, universities, school districts, companies, or state agencies, etc.).

Table 5.5. Access Point Function by Type of Access Point

Question	Response Categories	Type of Access Point (NEWTYPE2) ERIC Clearing-houses & Facility (n=17)	Academic Access Points (n=1,728)	Other Access Points (n=1,524)	All Access Points (n=3,269)
A. Is one of your organization's primary functions to provide information services (e.g., documents, statistics, literature searches, answers to questions, etc.)? (Q1P3)	Yes	100.0%	96.4%	93.0%	95.5%
	No	0.0	3.6	7.0	4.5
	Total	100.0%	100.0%	100.0%	100.0%
B. Which of the following categories best describes the largest single groups of users your organization services? (Q1P4)	Employees of or students affiliated with your organization or its parent organization.	11.8%	97.8%	51.9%	81.7%
	Employees of or students affiliated with other organizations.	52.9	1.4	22.1	9.1
	Other	35.3	0.8	26.0	9.2
	Total	100.0%	100.0%	100.0%	100.0%
C. Are the services provided by your organization intended primarily to support or promote activities associated with teaching, education, or training? (Q1P5)	Yes	94.1%	98.3%	74.5%	91.3%
	No	5.9	1.7	25.5	8.7
	Total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

important point in distinguishing between organizations such as traditional libraries, which may serve primarily a local clientele, and clearinghouses, which may be designed for a regional or national constituency.[1]

Two of the 17 access points in the ERIC Clearinghouses and Facility category responded that the largest single group of users served were employees or students affiliated with their own organizations. Nearly all (97.8%) of the 1,728 academic access points identified this group as its single largest user group, while about half (51.9%) of the Other Access Points did so. Both the Clearinghouse and Other Access Point categories identified "other" primary users, a category which included housewives, volunteer groups, private citizens/general public, and both of the first two groups. It is perhaps significant that almost one-fourth (22.1%) of the Other Access Points identified users outside their organizations as their largest group of users; these access points included "intermediary service providers" and other non-ERIC clearinghouses, as well as state education agencies.

Finally, access points were asked if their activities were intended primarily to support activities associated with teaching, education, or training (C). Sixteen of the 17 access points in the ERIC Clearinghouse and Facility responded "yes" to this, as did the substantial majority of the Academic Access Points (98.3%). However, one-fourth (25.5%) of the Other Access Points stated that their primary function was *not* to support teaching, education, and training; this indicates that ERIC, in the case of Other Access Points, has penetrated the market outside the U.S. education communities.

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[1] Applied Management Sciences, Inc., and Cuadra Associates, in *Descriptive Analysis of Human Services Clearinghouses* (Silver Spring, Md., January 1981, NTIS No. PB81-169997) defined clearinghouses as organizations which performed all of the following: specifying a focus; acquiring literature; developing an organized collection with appropriate access tools; accepting inquiries; responding to inquiries in a nonstandard fashion; providing a search capability; *engaging in outreach and dissemination* (emphasis added).

5.4 Description of Access Points' Microfiche Facilities

Rather than rely entirely on a centralized document delivery service, ERIC relies on the use of microfiche as a cost-effective method of document delivery. At the present time, microfiche collections[1] are maintained in 1,127 U.S. access points, which breaks down as follows:

o ERIC Clearinghouses and Facility	17 collections
o Academic Access Points	759 collections
o Other Access Points	351 collections
Total	1,127 collections

This total is considerably higher than the 624 organizations listed in the directory published by ERIC in September 1978, and is due, we hypothesize, to the less restrictive definition we used in defining a microfiche collection.

Table 5.6 describes the types of facilities maintained for providing access to microfiche, described in terms of (a) whether the collection is a "closed" collection[2], (b) whether the access point has facilities for making duplicate fiche, (c) number of microfiche readers, and (d) number of microfiche reader-printers.

Overall, 42 percent of the access points have closed collections, with a high of 65.9 percent for Other Access Points with fiche collections and a low of 11.8 percent for ERIC Clearinghouses and Facility. Only about one-third (32.1 percent) of the Academic Access Points have "closed" collections. This suggests that user support costs on a unit basis may be higher at Other Access Points than at Academic Access Points due to the potentially higher staff time required for both retrieving and re-filing.

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[1] The term "collection" was defined in the Access Point Screener Survey as "...a group of microfiche or paper documents which are shelved or filed together in one location". In this section, we refer only to ERIC microfiche collections.

[2] A "closed" collection was defined as one in which a user requires "...the assistance of a staff member to both retrieve and re-file ERIC microfiche". Thus, a fiche collection in which staff handle only re-filing would not be classified as a "closed" collection.

Table 5.6. Description of Access Point Microfiche Facilities by Type of Access Point

Characteristics of Access Points with Microfiche Collections		Type of Access Point with Fiche Collection (NEWTYPE2 with ERICFICH=1)			
		ERIC CH's & Facility (n=17)	Academic Access Points (n= 758)	Other Access Points (n= 351)	All Access Points (n=1,127)
A. Percent of access points with microfiche collections which have "closed collections" (Q4P3)		11.8%	32.1%	65.9%	42.2%
B. Percent of access points with microfiche collections which have access to fiche-to-fiche duplicating equipment (Q4P10)		0.0%	17.2%	33.9%	22.2%
C. Number of microfiche readers (Q4P7A)	None	5.9%	0.0%	4.8%	1.4%
	1	11.8	7.5	37.6	16.0
	2-3	35.3	19.5	27.6	22.0
	4-5	23.6	24.7	19.9	23.3
	6-10	11.8	31.5	5.5	24.0
	11 or more	11.8	16.8	4.6	13.3
	Total	100.0%	100.0%	100.0%	100.0%
	Mean	4.3	7.1	6.4	6.9
	Median	3.4	5.4	2.4	4.5
D. Number of microfiche reader-printers (Q4P7B)	None	5.9%	7.5%	17.7%	10.3%
	1	76.5	55.8	56.0	56.2
	2	17.6	24.5	15.1	21.8
	3 or more	0.0	12.2	11.2	11.7
	Total	100.0%	100.0%	100.0%	100.0%
	Mean	1.1	1.7	1.7	1.7
	Median	1.1	1.3	1.1	1.2

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

Less than one-fourth (22.1 percent) of all access points with ERIC fiche collections report having access to equipment for making duplicate fiche. About one-third (33.9 percent) of Other Access Points have access to some equipment, perhaps due to the more geographically-dispersed user populations of Other Access Points such as Intermediary Service Providers which rely upon mail service to deliver fiche copies.

The mean number of microfiche readers[1] at all the access points with ERIC microfiche collections is 6.9, with a median of 4.5. (In other words, half of the access points with ERIC fiche collections have less than five microfiche readers.) Academic Access Points and Other Access Points have approximately equal numbers of microfiche readers, with means of 7.1 and 6.4 respectively. However, the medians for both groups are 5.4 and 2.4 respectively, meaning that, proportionally, the reader collections at Other Access Points tend to be smaller than at Academic Access Points.

The number of microfiche reader printers is substantially similar across all types of access points, with a mean of 1.7 and median of 1.2. We attribute this to the higher purchase and maintenance costs of such equipment, coupled with possible restrictions on demand imposed by access points via such diverse methods as coin-operated machines and lack of user familiarity with equipment. We note, however, that approximately 90 percent of all access points with fiche collections have reader-printers versus only 22.2 percent with fiche-to-fiche duplicating equipment. It is also interesting to note that, proportionally, Other Access Points are more likely to have fewer reader-printers and more fiche-to-fiche duplicators than are academic access points. Is this because Other Access Points are less likely to rely upon papercopy distribution than microfiche distribution than are the Academic Access Points? If so, is this due to purely economic reasons (e.g., the expense of reproducing and distributing papercopy), or to the heavier equipment investments at Academic Access Points, or to, possibly, the fact that the Other Access Points may be tending to be more innovative in their provision of ERIC-based services?

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[1] Includes equipment which can be used for reading microfiche only or for both microfilm and microfiche.

5.5 User Training

One of the most significant activities which can be engaged in by the provider of an information product or service is user training. User training can accomplish the following:

1. It can publicize an information product or service among its potential users.
2. It can publicize the organization which provides the product or service.
3. It can teach potential users about a specific product or service.
4. It can provide potential users with generic knowledge which is transferable to demand for, and usage of, other information products and services.

ERIC, as a highly decentralized system, must rely upon its access points for the bulk of its user training, which can take many forms, ranging from formal classroom-type lectures to audiovisual-supported programmed instruction to hands-on practicums.

In the Access Point Screener Survey, we asked, first, what types of training activities had been engaged in during the past twelve months, and second, how many individuals had been trained during the past twelve months.

In the first case, we subdivided training along two dimensions which are important to ERIC. The first dimension is whether or not the training is ERIC-specific, i.e. whether or not ERIC is taught by itself or in conjunction with other products or services.[1] This dimension is important because it is an indicator of the degree to which an access point is willing---or able---to single out ERIC for special attention. The second dimension is whether or not the training is aimed at individuals associated with an access point (e.g., students or teachers at a college or university) or at individuals outside the organization (say, teachers or administrators in another school system or organization). This is an indicator of the degree to which ERIC has the potential of generating or being subject to demand outside the immediate organizational boundaries of its access points.

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[1] "Formal training sessions" such as lectures and supervised hands-on instruction are considered here. This definition was intended to exclude impromptu training delivered while access point staff aided individual requestors; this is considered in more detail in the Access Point Primary Survey.

Table 5.7 displays the responses to questions addressing these two dimensions; the specific training categories are identified as items 'a' through 'd'. The percent of access points which engage in each is subdivided by type of access point and by product/service mix.

Across all access points, the single category of training carried out most often is the training of individuals from within the organization on ERIC in conjunction with other information products and services. Nearly half of the access points (47.2%) engaged in this type of training. However, this differs substantially by type of access point. While nearly three-fourths (70.6%) of the ERIC Clearinghouses and Facility engage in this type of training (12 of these 17 access points), only about one-third (33.7% or approximately 514) of the Other Access Points engage in this type of training. In fact, across all four training categories, the ERIC Clearinghouses and Facility are more frequently involved in ERIC training than are the Academic Access Points, which in turn are more frequently involved in training than the Other Access Points. And across all access points, individuals within the access point or its parent organization are more frequently trained than are individuals outside of the access point or its parent organization.

Examining the columns labeled "ERIC Product or Service Mix", we see that, across all categories, the more ERIC products or services provided by an access point, the more likely it is that that access point will provide ERIC training. For example, more than four-fifths (80.6%) of access points which provide access to all four ERIC categories[1] train individuals in their organization on ERIC in conjunction with other products and services, while only about one-third (33.1%) of those access points which provide access to only one product or service provide such training.

We have seen from the above that, in terms of percents, access points differ in the type of training they offer. This is, in turn, dependent upon (1) the type of access point (e.g., the Clearinghouses are more likely than other types of access points to provide training), and (2) the product/service

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[1] RIE, CIJE, documents, computer searching.

Table 5.7. Percent of Access Points which Conduct ERIC Training, by Type of Access Point and by ERIC Product/Service Mix

	Type of Access Point (NEWTYPE2)			ERIC Product/Service Mix[1] (OVERLAP2)				
Training Category	ERIC Clearing-houses & Facility (n= 17)	Academic Access Points (n=1,728)	Other Access Points (n=1,524)	Only One (n=1,508)	Only Two (n= 882)	Only Three (n= 536)	All Four (n= 343)	All Access Points (n=3,269)
a) Formal training sessions for students or employees of your organization or its parent organization (e.g., lectures, tours, supervised hand-on instruction) which concentrated primarily on ERIC products and services (Q7P1A)	88.2%	37.0%	12.8%	9.7%	22.7%	44.8%	75.9%	26.3%
b) Formal training sessions for individuals outside your organization or its parent organization which concentrated primarily on ERIC products and services (Q7P1B)	94.1%	10.2%	4.7%	0.0%	9.2%	15.1%	30.3%	8.2%
c) Formal training sessions for students or employees of your organization or parent organization which included ERIC along with other information products or services (Q7P1C)	70.6%	58.3%	33.7%	33.1%	44.0%	68.1%	80.6%	47.2%
d) Same as (c), but conducted for individuals outside your organization or parent organization (Q7P1D)	76.5%	9.9%	7.1%	0.7%	12.8%	12.5%	29.4%	9.4%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

mix (the more ERIC products or services provided, the more training). Neither of these points is surprising, since the ERIC Clearinghouses are by definition ERIC-oriented, and since access point expenses increase with the number of ERIC products or services offered, perhaps stimulating the need for training. Nevertheless, these data do demonstrate that at least 1,500 of the 3,269 U.S. ERIC access points do provide ERIC training of some sort.

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[1] "Mix" refers to whether an access point does one or more of the following:
- Subscribes to RIE
- Subscribes to CIJE
- Maintains an ERIC microfiche or papercopy document collection
- Conducts online or batch searches of the ERIC bibliographic database

However, the above discussion does not give any indication of the actual number of individuals trained to use ERIC products or services. This is demonstrated in Table 5.8. Looking at the last column of this table, we see that, over all types of access points, more than one-third (36.1%) of all access points report training no individuals on the use of ERIC products or services. Since there is such a high non-response rate to this question, however, this may be an under-estimate of the number of access points which did no training. Even taking this into account, we see that the mean (average) number of individuals trained to use ERIC during the past year is 76.5 individuals per access point per year. The distribution for responses to this question is highly skewed, as shown by the median for the 63% of access points responding. For these access points which answered this question, the median number of individuals trained per year is .3. In other words, 50% of the access points which reported trained one or more individuals per year, and 50% trained zero individuals per year.

Using 76.5 as the average, and dividing it by 12, yields a monthly average of 6 individuals per month trained per access point to use ERIC. Were this pace to continue over a five year period, this would yield approximately 1.25 million individuals[1] trained to use ERIC over a 5-year period, approximately 59% of which[2] would be trained by academic access points. Even though ERIC Clearinghouses train an average of 536 individuals per year per access point to use ERIC, over a 5-year period this would yield approximately 46,000 individuals,[3] which is approximately 4% of this (roughly-estimated) 5-year total. (It should be noted, however, that the Clearinghouses may train

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[1] (3,269 access points)x(76.5 individuals per year)x(5 years) = 1,250,392 individuals.

[2] (1,728 academic access points)x(85.1 individuals per year)x(5 years) = 735,264 individuals; 735,264 ÷ 1,250,392 = .588.

[3] (17 Clearinghouses & Facility)x(536.2 individuals per year)x(5 years) = 45,577 individuals; 45,577 ÷ 1,250,392 = .036.

Table 5.8. Number of Individuals Trained to Use ERIC Products or Services During Past Twelve Months, by Type of Access Point

Number of Individuals Trained to Use ERIC Products or Services (Q7P2)	Type of Access Point (NEWTYPE2)			
	ERIC Clearinghouses and Facility (n=17)	Academic Access Points (n=1,728)	Other Access Points (n=1,524)	All Access Points (n=3,269)
None (0)	5.9%	29.1%	44.0%	36.1%
1-100	5.9	25.5	11.4	18.2
101-1,000	64.6	9.5	3.3	6.6
More than 1,000	17.7	1.5	0.7	1.7
Don't Know/No Response	5.9	34.4	40.6	37.4
Total	100.0%	100.0%	100.0%	100.0%
Mean	536.2	85.1	57.6	76.5
Median	301.0	2.8	0.2	.3

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

a much higher proportion of intermediaries, which would mean that simply comparing the number of people trained by an access point is a misleading indicator for comparing training performance.)

5.6 Access Point Financial Support

Table 5.9 displays the primary sources of financial support for ERIC access points in the U.S. About half (49.7%) of the access points report that their primary source of financial support is a college or university budget; this reflects the large proportion of ERIC access points which are located in academic institutions. About twenty percent (21.6%) report their primary source of financial support is a local, county, or district school budget. Only 1.1 percent of the access points report that their primary source of financial support is a direct billing for services rendered.

Table 5.9. Primary Source of Access Point Financial Support

Primary Source of Financial Support (Q1P6)	Percent of Access Points (n=3,269)
1. College or University Budget	49.7%
2. State Funds (other than college or university budget)	6.1
3. Federal Grant(s) or Contract(s)	6.2
4. Private Funding (e.g., foundation, donation, etc.)	3.3
5. Direct billing or charges for services rendered (other than Federal grants or contracts)	1.1
6. Local, county, or district school budget	21.6
7. City, county, or municipal budget	6.4
8. Other	5.7
Total	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

5.7 Income from Sale or Distribution of ERIC Products or Services

One issue which has received much attention in the library field in recent years is whether or not to charge users for information services. Section 9 of the Access Point Screener Survey addressed this issue. Two types of income were considered: (1) income from contractual or other formal arrangements with other organizations, and (2) income from sales to or payment by individuals. "Contractual or other arrangements" were defined as "...agreements whereby your organization is reimbursed, by organizations other than ERIC, on an annual, monthly, or regular basis".

Table 5.10 displays the percent of U.S. ERIC access points which reported deriving more than $100 from the sale or distribution of ERIC products or services during 1980, broken down by (A) type of access point, and (B) product/service mix.

These data show that approximately 16.4 percent of the access points (about 536) of the 3,269 ERIC access points derived more than $100 from sale or distribution of ERIC products or services. As shown, however, this differs by the type of access point and by the number of ERIC products or services provided.

Fourteen of the 17 access points in the ERIC Clearinghouses and Facility category derived more than $100, 20.7 percent of the Academic Access Points did so, and only 10.8 percent of the Other Access Points did so.

Line "B" shows that the likelihood of an access point deriving this income increases with the number of products or services offered, with only 10.3 percent of access points with one product doing so, while nearly half (48.0%) of those with all four doing so.

Table 5.10. Percent of Access Points which Derived More Than $100 from ERIC Products or Services during 1980, by Type of Access Point and by ERIC Product/Service Mix

Variable	Response Category	Percent of Access Points which Derived More Than $100 from ERIC Products or Services during 1980 (Q9PO=1)
A. Type of Access Point (NEWTYPE2)	ERIC Clearinghouses & Facility (n=17)	81.3%
	Academic Access Points (n=1,728)	20.7%
	Other Access Points (n=1,524)	10.8%
B. ERIC Product/Service Mix[1] (OVERLAP2)	Only one (n=1,508)	10.3%
	Only two (n=882)	8.6%
	Only three (n=536)	25.9%
	All four (n=343)	48.0%
C. All Access Points (n=3,269)		16.4%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

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[1] "Mix" refers to whether an access point does one or more of the following:

- Subscribes to RIE
- Subscribes to CIJE
- Maintains an ERIC microfiche or papercopy document collection
- Conducts online or batch searches of the ERIC bibliographic database.

SECTION 6

DESCRIPTION OF ERIC USAGE

The purpose of this section of the report is to present data on the usage of ERIC. Data are presented both in average (per access point) terms, as well as in terms of total annual usage. Average use is derived from the Access Point Screener Survey (Section 6.1). Data on annual usage is derived from the Access Point Screener and Access Point Primary Survey (Section 6.2). Data on the U.S. educational community's awareness and use are presented in Section 6.3, and finally, data describing a follow-up study of specific ERIC requestors is presented in Section 6.4.

6.1 Description of Usage at U.S. ERIC Access Points

6.1.1 Average Monthly Demand for ERIC

Access points were asked to estimate average monthly demand for RIE, CIJE, ERIC microfiche, and online searches of ERIC, either by itself or in conjunction with other databases. The questions were worded so that demand, as much as possible, could be compared across products and services. Question wording was as follows:

> 2.3 On the average, how many times per month does your organization's staff consult RIE? (Please base your estimate on the number of individual information requests which result in RIE use by your organization's staff. Include your organization's staff use as well as staff assistance to requestors, whether or not requestors are physically present. Insert number in box, zero if none. Insert "DK" for Don't Know.)
>
> 3.3 On the average, how many times per month does your organization's staff consult ERIC's Current Index to Journals in Education (CIJE)? (Please base your estimate on the number of individual information requests which result in CIJE use by your organization's staff. Include your organization's staff use as well as staff assistance to requestors, whether or not requestors are physically present. Insert number in box, zero if none. Insert "DK" for Don't Know.)
>
> 4.6 On the average, approximately how many times per month is your ERIC microfiche collection used? (Estimate the number of times ERIC documents on microfiche are retrieved from the collections, either by your organization's staff or by individual requestors. Include use of ERIC microfiche in your organization's facility as well as retrieval of ERIC microfiche for copying or distribution to other organizations.) (As above, report usage for either the number of individual pieces of microfiche or the number of individual report titles. Insert "DK" for Don't Know.)

6.3 On the average, how many online searches of the ERIC bibliographic database are conducted by staff members of your organization per month? (Please base your response on the number of requests you receive which result in your performing an online search, regardless of the number of search commands or descriptor combinations which are used during the course of a single terminal session.)

Responses to these questions are displayed in Table 6.1, subdivided by type of access point. Displayed for each category are the mean, median, and number responding (weighted).

For both RIE and CIJE, ERIC Clearinghouses and Facility account for the largest mean and median number of requests resulting in staff consultation of RIE and CIJE, with RIE being used about twice as much as CIJE. This is reversed for the Academic Access Points and the Other Access Points; RIE is used two-thirds to one-half as many times per month at these access points as CIJE. In terms of both the mean and the median, across all access points, CIJE is used more often than RIE.

On the basis of comparing means, the Other Access Points show the greatest monthly demand for ERIC microfiche, with a monthly average of 490 410 title retrievals. This is due to a few large intermediate service providers in this category which make very heavy use of the microfiche. This is somewhat misleading, however, which is why the median is also displayed. Other Access Points have by far the lowest median monthly demand for ERIC microfiche; half of the Other Access Points report microfiche titles being retrieved five or fewer times per month. Such an extreme difference between the mean and median is a characteristic of highly skewed distribution. Also, the lower ratio of mean to median for Academic Access Points when compared to Other Access Points suggests that Academic Access Points are a much more homogeneous population than the Other Access Points.

Perhaps surprisingly, access points are remarkably similar in terms of their online searching activity. On the average, 20 ERIC online searches are conducted per month, with a median of nine. The ERIC Clearinghouses and Facility conduct the most per month, with a mean of 30. The Academic Access Points and Other Access Points are very similar in terms of their medians,

Table 6.1 Average Monthly Demand for ERIC Products and Services by ERIC Category and Type of Access Point

ERIC Category		Type of Access Point (NEWTYPE2)			
		ERIC Clearinghouses & Facility	Academic Access Points	Other Access Points	All Access Points
A. No. of times per month RIE is consulted by staff (Q2P3)	mean	304	30	8	23.2
	median	102	6	4	5.1
	(n)[1]	(17)	(1,566)	(1,125)	(2,708)
B. No. of times per month CIJE is consulted by staff (Q3P3)	mean	127	45	17	36
	median	51	15	8	12
	(n)	(17)	(943)	(433)	(1,393)
C. No. of times per month individual ERIC fiche titles are retrieved (MONFICHE)	mean	407	139	490	252
	median	153	63	5	20
	(n)	(17)	(758)	(351)	(1,127)
D. No. of times per month ERIC online searches are conducted (Q6P3C)	mean	30	15	32	20
	median	16	9	8	9
	(n)	(16)	(478)	(187)	(682)

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

nine versus eight respectively. We believe that this is due maybe just as much to overt demand for online searching being similar between the two types of access points as to the constraints imposed by the management of online searching. That is, relatively few individuals in libraries and other access points are actually trained in conducting online searching, and this puts an upper bound on the number of searches which can be conducted on a daily as well as monthly basis. What is more significant are the similarities between Academic Access Points and Other Access Points in their average volume of searching. Unlike use of RIE, CIJE, and microfiche (with its relatively low median for microfiche), online searching appears to be a more "democratic" form of information access in that it is not restricted to academic access points. In this respect, online searching of ERIC does appear to demonstrate the feasibility of expanding use of ERIC through electronic means.

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[1] "n" refers to the number of access points.

[2] For estimates of total annual usage, the reader should refer to Tables 6.9 and 6.10, which present totals adjusted for unassisted usage as well as for differences accounted for by access points of different sizes.

6.1.2 Seasonality of ERIC Demand

Access points were asked to identify the months during the year with the highest and lowest use of RIE, CIJE, ERIC microfiche, and ERIC computer searching. Responses to these questions were very similar, as displayed in Table 6.2. October was identified by the majority in each category as the month with highest demand; August was the month identified by the majority as having the lowest demand.

Table 6.2 Months with Highest and Lowest Use of ERIC, by Month and ERIC Category

Month with Highest or Lowest Use	RIE (n=2,708)		CIJE (n=1,393)		ERIC Microfiche (n=1,127)		ERIC Computer Searching	
	Highest (Q2P2A)	Lowest (Q2P2B)	Highest (Q3P2A)	Lowest (Q3P2B)	Highest (Q4P5A)	Lowest (Q4P5B)	Highest (Q6P1A)	Lowest (Q6P1B)
January	3.2%	5.3%	3.0%	7.1%	3.8%	8.1%	5.1%	6.7%
February	8.6	0.3	7.1	0.5	3.1	0.7	4.9	2.0
March	9.9	0.4	4.1	0.3	5.1	0.0	9.9	1.9
April	7.0	0.0	5.0	0.0	10.3	0.1	4.1	1.3
May	5.7	5.6	4.7	6.6	3.8	9.6	6.4	9.0
June	5.8	4.5	8.2	6.1	4.2	12.1	3.2	7.9
July	11.5	23.7	12.1	18.3	13.8	15.1	9.2	11.6
August	2.2	35.6	0.8	36.2	2.4	32.2	2.5	35.6
September	6.1	7.0	5.6	5.5	8.9	9.1	13.4	8.5
October	24.4	2.3	30.3	0.4	26.4	1.0	31.7	1.1
November	13.6	0.1	17.3	0.2	16.2	0.3	8.1	0.4
December	1.9	15.1	1.7	18.7	1.9	16.8	1.5	14.1
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

6.1.3 Unassisted vs. Assisted Use for RIE and CIJE

Access Points which subscribed to RIE and/or CIJE were asked to estimate, on an average monthly basis, how many times access point staff consulted RIE or CIJE, either in response to their own or to other individual users' requests. Not included were individuals' consultation of RIE or CIJE which were not assisted by access point staff. This "unassisted" category of use was not included in the estimate of average monthly requests since we had found during questionnaire pretesting[1] that access point staff did not feel capable of providing reasonable estimates of this category of RIE and CIJE use. (This point is discussed in more detail in the analysis of the Primary Survey.)

Nevertheless, we did ask in the Access Point Screener questionnaire whether "unassisted" use of RIE and CIJE was greater than, less than, or about the same as, assisted use. Responses to this question, for RIE subscribers and CIJE subscribers which did not respond "not applicable" to this question, are displayed in Table 6.3.

Over all access points, nearly one-third (29.2%) of RIE subscribers said that unassisted use was greater than assisted use, while nearly half (46.1%) of CIJE subscribers stated that unassisted CIJE use was greater than assisted use. The greatest difference occurs with the ERIC Clearinghouses and Facility category, where 60 percent (9 out of 15 of the access points in this category) reported unassisted use to be less than assisted use.

Despite the large proportion of "don't know" responses to this question, the responses are evidence that:

- in a substantial number of access points, unassisted use of RIE and CIJE is at least equal to assisted use;

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[1] We would like to acknowledge the substantial input provided by Mr. Edward Warner and the staff of the Chester Fritz Library of the University of North Dakota during the development of the Access Point Screener Survey questionnaire, particularly their detailed review of the procedures followed in estimating assisted and unassisted use.

Table 6.3 Relationship of Unassisted Use to Assisted Use for Resources in Education and Current Index to Journals in Education, by Type of Access Point

Type of Access Point[1] (NEWTYPE2)	Relationship between Unassisted Use and Assisted Use (Q2P4 and Q3P4)				
	Greater Than	Less Than	About the Same	Don't Know	Row Total
ERIC Clearinghouses & Facility					
RIE (n=15)	26.7%	60.0%	13.3%	0.0%	100.0%
CIJE (n=15)	26.7%	60.0%	13.3%	0.0%	100.0%
Academic Access Points					
RIE (n=1,477)	36.1%	23.8%	11.0%	29.1%	100.0%
CIJE (n=868)	57.3%	13.7%	10.0%	19.0%	100.0%
Other Access Points					
RIE (n=972)	18.6%	33.0%	13.2%	35.2%	100.0%
CIJE (n=397)	22.5%	34.0%	14.2%	29.4%	100.0%
All Access Points					
RIE (n=2,464)	29.2%	27.6%	11.9%	31.3%	100.0%
CIJE (n=1,280)	46.1%	20.5%	11.3%	22.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

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[1] The "n's" given in this table do not include access points which responded "not applicable" to this question; these were approximately nine percent of 2,708 RIE subscribers and eight percent of the 1,393 CIJE subscribers.

- CIJE is used more often (proportionally) by individuals working on their own than is RIE.

There are several possible reasons for this last finding, such as:

- CIJE's being similar to other printed abstracts and indexes which cover literature published in journals and magazines;
- RIE's being located in a substantial number of access points where ERIC documents are not available. (Based on our calculations, 1,556 (57.5%) of the 2,708 RIE subscribers do not maintain their own ERIC document collections.)

Despite the likelihood that ERIC document collections are readily accessible, at least from the standpoint of the access point staff, we feel that it is inevitable that the lack of an immediately available ERIC document collection may result in the proportionally lower unassisted use of the RIE when compared with CIJE. We base this on our knowledge of past research in information use which showed that physical proximity of an information product is an important determinant of its use. We hypothesize that this is true even when rapid access is provided via a dedicated mail or delivery service from an access point's document collection or from EDRS.

This is not to say that unassisted use of ERIC is "better than" assisted use, a point which is addressed elsewhere in the discussion of the Requestor Survey results. But, it is a fact that many access points promote unassisted use through their offering of ERIC training, especially academic access points; this may be why the ratio of unassisted to assisted RIE use is higher for Academic Access Points than for Other Access Points. An important question, which is unanswered here, is to what extent unassisted use of RIE can be promoted given the built-in delay of obtaining the documents at so many of the access points which subscribe to RIE. Another question, regarding CIJE, is the degree to which requestors obtain the articles they identify where using CIJE; this is addressed in the analysis of Requestor Survey results.

6.1.4 Relative Use of Different Search Services for Online Searching of ERIC

The three major search services in the U.S. which provide online access to the ERIC bibliographic database are Lockheed, SDC, and BRS. Their relative use for accessing ERIC are displayed in Table 6.4. Here we see that more than half (54.1%) of the access points which conduct or make arrangements for online searching use Lockheed for 100 percent of their ERIC searches. Other Access Points are more likely to use Lockheed for all ERIC searches than are Academic Access Points, 71.5% versus 47.5%, respectively.

All access point types are approximately equal in their non-use of SDC for searching ERIC; approximately 87.4 percent of all access points report conducting no ERIC searches on SDC.

Two-thirds (67.5%) of ERIC access points also report they conduct no ERIC searches via BRS.

The range of percents given in Table 6.4 also demonstrates, however, that there is occasionally joint use of the various systems, with combinations of Lockheed and BRS being more common than combinations of Lockheed and SDC.

Few access points (about 3%) report using other online systems, examples of which would be access points which mount their own tapes for providing online searching capabilities.

Table 6.4 Percent of Online ERIC Searches by Type of Access Point and Search System

Search System	Percent of ERIC Searches	Type of Access Point (NEWTYPE2)			
		ERIC Clearinghouses & Facility	Academic Access Points	Other Access Points	All Access Points
A. Number of access points which conduct or make arrangements for online ERIC searches (ONLINE=1)		16	478	187	682
B. Lockheed (Q6P5A)	None (0%)	12.5%	22.1%	4.1%	16.5%
	1-50%	25.0	20.7	14.9	19.4
	51-99%	25.0	9.7	9.5	10.0
	All (100%)	37.5	47.5	71.5	54.1
	Total	100.0%	100.0%	100.0%	100.0%
C. SDC (Q6P5B)	None (0%)	81.2%	88.7%	84.9%	87.4%
	1-50%	12.5	11.0	15.1	12.2
	51-99%	0.0	0.3	0.0	0.2
	All (100%)	6.3	0.0	0.0	0.2
	Total	100.0%	100.0%	100.0%	100.0%
D. BRS (Q6P5C)	None (0%)	43.8%	60.1%	88.5%	67.5%
	1-50%	31.2	8.4	7.4	8.9
	51-99%	25.0	15.6	2.2	11.9
	All (100%)	0.0	15.9	1.9	11.7
	Total	100.0%	100.0%	100.0%	100.0%
E. Other (Q6P5D)	None (0%)	100.0%	98.6%	94.4%	97.4%
	1-50%	0.0	0.1	3.5	1.1
	51-99%	0.0	0.4	1.2	0.7
	All (100%)	0.0	0.8	0.9	0.8
	Total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

6.1.5 Searching ERIC in Conjunction with Other Databases

Due to the variety of (several hundred) bibliographic databases which are currently available online in the United States, it is to be expected that ERIC will not be the only database searched during the course of many ERIC searches. We addressed this point by asking in the Access Point Screener Survey about the use of ERIC by itself versus the use of ERIC in conjunction with other databases. Table 6.5 displays responses for the ERIC access points which conduct or make arrangements for ERIC online searches. Data categories B and C show

B: Searches per month of only the ERIC database, and
C: Searches per month of the ERIC database in combination with other databases.

The mean and median are displayed for both.

First, the ratio of "ERIC-only" to "ERIC-plus-other" searches differs substantially among the three access point categories:

1.	ERIC Clearinghouses & Facility	7-to-1 (i.e., 21.0÷3.1)
2.	Academic Access Points	1-to-1 (i.e., 7.5÷7.0)
3.	Other Access Points	2-to-1 (i.e., 21.2÷10.8)

In terms of concentration upon ERIC, the ERIC Clearinghouses & Facility are on top, followed by the Other Access Points, then the Academic Access Points. This may reflect Other Access Points' more narrow subject focus (on education) than the Academic Access Points. It also generates a hypothesis that, as the number of ERIC searches increases, the likelihood increases that the proportion of "ERIC-only" searches also increases. (We have not specifically tested this hypothesis, which might be the topic of further research.)

Second, it is possible that the differences in terms of "ERIC-only" versus "ERIC-plus-other" searches also reflects the frequency with which ERIC access points conduct ERIC searches for other organizations which forward their ERIC search requests to the ERIC access points. With data category E on Table 6.5, we see the frequency with which the access points conduct ERIC searches which are forwarded to them by other information providers. It is clear that Other Access Points are the most likely, both in absolute and proportional terms, to conduct ERIC searches for other information providers; slightly more than one-fourth (26.3%) of the Other Access Points report that

Table 6.5 Number of ERIC Online Searches Conducted per Month by Type of Access Point

Data Category		Type of Access Point (NEWTYPE2)			
		ERIC Clearing-houses & Facility	Academic Access Points	Other Access Points	All Access Points
A. Number of access points which conduct or make arrangements for online ERIC searches (ONLINE=1)		16	478	187	682
B. Searches per month conducted by staff of only the ERIC database (Q6P3A)	Mean	21.0	7.5	21.2	11.8
	Median	14.7	4.0	3.6	4.0
C. Searches per month conducted by staff of the ERIC database in combination with other databases (Q6P3B)	Mean	3.1	7.0	10.8	8.0
	Median	0.4	2.4	4.6	2.8
D. Total all online ERIC searches conducted by staff (Q6P3C)	Mean	30.4	14.8	32.3	20.4
	Median	15.5	8.8	7.9	8.7
E. Percent of (D) conducted in response to requests forwarded by other information providers (Q6P4)	None(0)%	12.5%	59.5%	50.0%	55.4%
	1-25%	75.2	36.2	23.7	33.5
	26-100%	12.3	4.3	26.3	11.1
	Total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

26 percent or more of the ERIC search requests which they conduct are done for other information providers. It appears, based on this, that Other Access Points are more likely to be involved in cooperative inter-organizational activities such as those provided by intermediary service providers, state education agencies, and others, at least when measured in terms of online searching.

6.1.6 Forwarding of ERIC Online Search Requests to Other Organizations

In order to conduct an online search of a particular database, an access point must:

- have access to a computer terminal
- possess an appropriate account number and password to connect with a system which offers the database
- have staff who are qualified to log onto the system and conduct a search (i.e. construct a search statement, interact with the system, etc.)
- have money to pay for the search

Since not all access points are likely to possess all four of the above, we asked in the Access Point Screener Survey about the frequency with which access point staff might forward search requests to other organizations to conduct. Responses to these questions are displayed in Table 6.6.

Of all access point types, the Clearinghouses and Facility are the most likely to forward search requests (of any database) to other organizations; one-fourth (25%) of these access points forward six or more search requests per month to other organizations. In fact, access points in this category forward an average of 6.4 search requests per month to other organizations to conduct, perhaps reflecting ERIC policy which places less emphasis on user support services for ERIC Clearinghouses than for other types of access points.

Not surprisingly, 60 percent of the ERIC Clearinghouse access points which do forward search requests to other organizations do report that 100 percent of these forwarded search requests include searches of the ERIC database.

These facts should be taken into account when evaluating responses to the Requestor Population Survey conducted as part of this study. That is, even if Clearinghouse & Facility staff negotiate requests with users and construct search statements, many of the searches reported by this access point category will be for searches actually conducted by staff other than Clearinghouse and Facility staff.

Table 6.6 Requests per Month for Online Searches Forwarded to Other Organizations by Type of Access Point

		Type of Access Point (NEWTYPE2)			
Data Category		ERIC Clearing-houses & Facility	Academic Access Points	Other Access Points	All Access Points
A. Number of access points which conduct or make arrangements for online ERIC searches (ERICSRCH=1)		16	478	187	682
B. Number of requests per month for online searches of any database which are transmitted to other organizations (Q6P6)	None (0)	37.5%	79.3%	82.1%	79.1%
	1-5	37.5	17.0	10.6	15.8
	6 or more	25.0	3.7	7.3	5.1
	Total	100.0%	100.0%	100.0%	100.0%
	Mean	6.4	1.0	3.7	1.9
C. Percent of (B) which include searches of ERIC (Q6P7)	None (0%)	20.0%	37.2%	30.2%	34.4%
	1-25%	10.0	19.7	0.0	15.0
	26-75%	10.0	15.6	28.6	18.5
	76-99%	0.0	9.3	8.1	8.1
	All (100%)	60.0	18.2	33.1	24.0
	Total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

Both Academic and Other Access Points much less frequently forward or refer requests to other organizations to conduct. Approximately 80 percent of the access points in each of these categories which conduct or make arrangements for ERIC searches forward no search requests to other organizations to conduct. For those access points in these categories which do forward search requests, however, Other Access Points are slightly more likely to forward more search requests, with Other Access Points forwarding an average of 3.7 requests per month versus 1.0 requests per month for Academic Access Points. Interestingly, search requests forwarded to other organizations by Other Access Points have a higher probability of being ERIC search requests, perhaps reflecting the Other Access Points' more narrow focus on the educational field itself than the broader-focused Academic Access Points.

We conclude from the above that about one-fifth (20.9%) of the ERIC access points do forward one or more search requests per month to other organizations, reflecting a fairly substantial amount of inter-organizational cooperation in this particular information access tool. Nevertheless, Academic and Other Access Points do not appear to differ substantially in this regard, despite Other Access Points conducting about twice as many ERIC searches per month per access point as Academic Access Points (32 versus 15 per month for these categories, respectively). We would predict that, as the overall volume of online searching continues to increase every year, that the proportion of access points which do not conduct their own searches will decrease. This may result in an increase in the overall number of customers served by the database search systems (such as Lockheed, BRS, and SDC), along with a probable increase in the overall number of ERIC searches.

Unfortunately, we did not collect in the screener survey data on growth trends for online searching among ERIC access points. Nevertheless, the major point to be aware of here is that online searching is not just a phenomenon limited just to academic access points, despite the somewhat outdated perception of ERIC as an information service which caters primarily to the academic community.

6.1.7 ERIC Batch Searching

In "batch" searching of ERIC, requests for searches are grouped together so that more than one search request can be run against the database at one time. Software which provides for batch searching of a database is simpler than the software necessary for online searching. About fifty organizations besides the major online search services subscribe to the ERIC tapes, many of which mount the tapes on their own computers for performing batch searches.

We estimate (Table 6.8) that 94 U.S. ERIC access points conduct or make arrangements for ERIC batch searches. We estimated earlier that 682 access points conduct or make arrangements for online ERIC searches; this indicates that online searching is the "search method of choice" for the majority of U.S. access points. This is entirely understandable, since an access point does not need access to its own computer for conducting an online search; access to a telephone and a portable computer terminal are sufficient.*

However, Table 6.8 also demonstrates that nearly half (47.2%) of the 94 batch search access points report that the staff of organizations other than their own or their parent organizations run the batch searches for them (variable Q6P10C).

The mean number of batch searches conducted per month by access points which provide this service is 20.8; this compares with the mean number of online searches conducted per month as follows:

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*During one site visit, we asked access point staff why they continued to conduct batch searches of the ERIC database when online searching was so accessible. Their response: (a) computer time was provided free by their campus computer; (b) their state government, not their library budget, paid for their subscription, and (c) the batch searching software had been developed under a government-funded research grant nearly a decade before.

Table 6.7 Comparison of Average Number of Online and Batch ERIC Searches per month by Type of Access Point

Average Number of ERIC Computer Searches per Month	Type of Access Point (NEWTYPE2)			
	ERIC Clearinghouses & Facility	Academic Access Points	Other Access Points	All Access Points
Online ERIC Searches (682 Access Points)	30.4	14.8	32.3	20.4
Batch ERIC Searches (94 Access Points)	15.5	34.6	3.8	20.8

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

Table 6.8 ERIC Batch Searching by Type of Access Point

Data Category		Type of Access Point (NEWTYPE2)			
		ERIC Clearing-houses & Facility	Academic Access Points	Other Access Points	All Access Points
A. Number of access points which conduct ERIC batch searches (Q6P8)		2	51	41	94
B. Number of ERIC batch searches conducted per month (Q6P9)	Mean	15.5	34.6	3.8	20.8
	Median	15.5	1.3	1.1	1.3
C. Task breakdown for batch searching:					
Task	Responsibility				
a) Negotiating, receiving, or clarifying request (Q6P10A)	1. Own staff	100.0%	100.0%	93.2%	97.0%
	2. Other dept.	0.0	0.0	6.8	3.0
	3. Other org.	0.0	0.0	0.0	0.0
	Total	100.0%	100.0%	100.0%	100.0%
b) Constructing the statement (i.e., selecting descriptors, constructing search logic, etc. (Q6P10B)	1. Own staff	100.0%	75.0%	100.0%	86.5%
	2. Other dept.	0.0	1.2	0.0	0.7
	3. Other org.	0.0	23.8	0.0	12.8
	Total	100.0%	100.0%	100.0%	100.0%
c) Running the batch search on the computer (Q6P10C)	1. Own staff	100.0%	18.1%	58.9%	37.8%
	2. Other dept.	0.0	23.4	5.5	15.0
	3. Other org.	0.0	58.5	35.6	47.2
	Total	100.0%	100.0%	100.0%	100.0%
d) Reviewing or screening the search output (Q6P10D)	1. Own staff	100.0%	74.8%	93.2%	83.4%
	2. Other dept.	0.0	13.8	6.8	10.4
	3. Other org.	0.0	11.4	0.0	6.1
	Total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

Across all types of access points that do searching, approximately an equal number of batch searches and online searches are conducted per month (20.8 vs. 20.4). However, Other Access Points conduct more online searches per access point than do Academic Access Points; this is reversed for batch searches, where Academic Access Points conduct more than Other Access Points.

One possible explanation for this is that Other Access Points have been, proportionally at least, quicker to shift to online searching than have Academic Access Points. Alternatively, Academic Access Points (like the one cited in our footnote) may have found it more cost-effective to perform batch searches because of their older equipment and software investments.

Table 6.8 also displays the breakdown of tasks involved in batch searching. Nearly all access points report that their own staff negotiate search requests (97.0%), as well as review or screen search output (83.4%). A majority (86.5%) also report they actually construct search statements for the batch searches. As noted above, nearly half (47.2%) report that staff at other organizations (rather than their own access point staff or staff within other departments of their parent organization) actually run the batch search on the computer.

6.2 Total Annual ERIC Usage

Based on the data provided by access points in the Access Point Screener Survey, which has been adjusted via the Access Point Primary Survey to take into account the differences between assisted and unassisted use, we have estimated the total annual usage for RIE, CIJE, ERIC computer searches, and ERIC documents.

These data are significant for the following reasons. First, they provide an understanding for the overall demand for the various products and services. This is one measure of the overall "performance" of the ERIC system. Second, by subdividing the usage estimates by such variables as type of use and type of access point, we can begin to identify the relative use of various channels for accessing ERIC-supplied information. This is another variable related to system performance, and it may be of use to NIE in its deliberations on how to modify or expand usage of the ERIC system. Third, these data on usage provide input into the overall cost analysis, in that the amount of time spent reading, consulting, or using ERIC products and services accounts for a significant proportion of the costs associated with the ERIC system.

Two caveats should be kept in mind when using the data from these tables. First, the estimates of "unassisted" use are conservative. That is, these estimates were made based on the proportion of requests classified as "unassisted" by the access points which participated in the Primary Survey. According to comments made by many of the participating access points, they were unable to observe in some cases all the unassisted use of the ERIC products they were monitoring. While we are unable to precisely estimate to what degree unassisted use has been underreported, we feel safe in estimating that the unassisted use reported here could be conservatively inflated for RIE and CIJE by a factor of 10-20 percent; because of the nature of access provided to ERIC documents (e.g., many closed collections) and ERIC searching (e.g., few people with individual accounts) we are much more confident in the completeness of document and searching estimates.

Our second caveat has to do with the relationship between requestors and requests in our usage estimates. That is, one requestor can account for multiple requests over a period of time, and more than one ERIC product or service can be used simultaneously, as reported in the Requestor Population Survey. Thus, totalling the requests across ERIC product or service categories would result in an overestimate of the number of individuals who use ERIC, and it would also result in an overestimate of the number of instances in time when individuals contact ERIC access points.

With the above in mind, let us first examine the data in Table 6.9, Total Annual ERIC Usage by ERIC Category and Type of Access Point. Here we see that, for RIE, usage via the ERIC Clearinghouses and Facility accounts for approximately 8.4 percent of total RIE usage. Usage of CIJE via ERIC Clearinghouses and Facility access points is approximately 4.2 percent of total CIJE usage.

Total usage of CIJE is about 10 percent more per year than RIE, despite there being almost twice as many RIE access points (n=2,708) as CIJE access points (n=1,393). Since the output of using these two products is different (i.e. ERIC "ED" documents vs. journal articles published in the open literature) a direct one-to-one comparison of the two is difficult. It does suggest additional hypotheses for future analysis of the Requestor Population Survey data, such as the degree to which RIE use is higher at access points with ERIC document collections than at access points without ERIC document collections. (We estimated earlier that approximately 43 percent of the RIE access points also have ERIC document collections. It may be that there is still a lack of awareness among access points and individual ERIC users of the ease with which documents can be ordered from EDRS.)

About 200,000 ERIC online and batch searches are conducted per year, according to these estimates; approximately 3 percent of these are conducted through ERIC Clearinghouses and Facility Access Points, 57 percent through Academic Access Points, and 40 percent through Other Access Points.

Table 6.9 Total Annual ERIC Usage by ERIC Category and Type of Access Point

ERIC Category	Type of Access Point ERIC Clearinghouses & Facility	Academic Access Points	Other Access Points	All Access Points
RIE	70,744	643,497	123,289	837,530
CIJE	38,240	750,741	130,256	919,237
ERIC Searches	6,484	113,323	77,861	197,668
ERIC Documents				
Retrievals	159,437	1,593,498	2,591,390	4,344,325
Requests[1]	28,821	288,051	468,436	785,308

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, Access Point Primary Survey, 1981.

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[1] Number of requests equals number of retrievals divided by 5.532, the average number of documents retrieved per request.

Document usage is described in terms of "retrievals" and "requests". The former is the number of times documents are retrieved; the latter is an estimate of the number of instances in which documents are requested (we estimate that there are approximately 5.532 documents retrieved per document request). In terms of document requests, Other Access Points account for about 63 percent more document requests per year than Academic Access Points; this is true despite there being more Academic Access Points with ERIC document collections (n=783) than Other Access Points with ERIC document collections (n=620). Proportionally, there are approximately as many Academic Access Points with ERIC document collections (45% of 1,728) as Other Access Points with ERIC document collections (41% of 1,524). This relatively higher document use among Other Access Points is particularly intriguing and suggests a variety of hypotheses, such as:

- Other Access Points do not have CIJE-accessible journal collections comparable to Academic Access Points, which forces a heavier reliance upon ERIC documents by Other Access Points relative to Academic Access Points.

- ERIC documents contain more practice-oriented literature than do CIJE-accessible scholarly journals, and are thus of higher potential utility than users served by Other Access Points.

Table 6.10 displays total annual usage by ERIC category, this time broken down by type of use. Given first are "unassisted" uses, i.e. uses where individual requestors accessed the product or service on their own. In all categories, unassisted use is always less than assisted use. For RIE and CIJE, however, we have already noted that there was underreporting for unassisted use. According to responses in the Access Point Screener Survey, 36.1 percent of RIE access points reported that unassisted RIE use was greater than assisted RIE use, while more than half (57.3%) of CIJE access points reported that unassisted CIJE use was higher than assisted use. This is reflected by the ratio of assisted to unassisted use for RIE and CIJE, 6-to-1 for RIE versus only about 2-to-1 for CIJE. We hypothesize that these different ratios may

Table 6.10 Total Annual ERIC Usage by ERIC Category and Type of Use

ERIC Category	Type of Use Unassisted Use	Assisted Use	Staff Use	Total
RIE	104,207	668,703	64,650	837,530
CIJE	350,146	527,098	41,993	919,237
ERIC Searches	7,749	184,055	5,864	197,668
ERIC Documents				
Retrievals	624,491	3,487,725	232,112	4,344,325
Requests[1]	112,887	630,464	41,958	785,309

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, Access Point Primary Survey, 1981.

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[1] Number of requests equals number of retrievals divided by 5.532, average number of documents retrieved per request.

be reflecting that CIJE is "more like" other printed abstracting and indexing services than RIE, which requires special instructions for users to make them aware that it provides intellectual access to documents which may not necessarily be locally accessible.[1]

The proportion of ERIC searches which are "unassisted" is very low, as expected: only about 4 percent of ERIC searches are conducted by users on their own.

Finally, a substantial proportion of ERIC document requests (about 80%) are assisted requests, probably reflecting the fact that a substantial proportion of ERIC document collections (about 42% of ERIC microfiche collections) are "closed" collections, requiring staff assistance.

It should also be noted that, across all categories of ERIC, staff use is substantial, suggesting that ERIC is making a significant contribution, information-wise, to the organizations which provide access to it.

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[1] It should be noted here, however, that it is a common practice, especially among academic libraries, to make use of networking arrangements and interlibrary loan services for accessing journal articles not in the library's collection. Therefore, remote locations for many ERIC document collections are not sufficient explanation for what appears to be a (relative) underutilization of RIE.

6.3 Awareness and Use of ERIC within the U.S. Educational Community

6.3.1 Use of Specific Products and Services

The Education Population Survey (see Appendix E) was designed to measure, via a mail questionnaire survey, awareness and use of ERIC among members of various groups in the U.S. educational population. This population, for purposes of this survey, was defined to include three major population groups:

1. Practitioners (teachers, principals and school librarians in public and private primary and secondary schools; estimated population size to which survey results have been projected: 1,626,467).

2. Administrators (school district staff and state education agency staff; estimated population size to which survey results have been projected: 130,506).

3. Academics and Consultants (faculty and department heads of academic education departments and education consultants; estimated population size to which survey results have been projected: 43,687).

Survey respondents were asked about their awareness and use of ERIC products and services. Results are displayed in Table 6.11. Under the column marked "used" are combined the following response categories:

- used during the past 4 weeks;
- used during the past 12 months;
- used over 12 months ago;
- used but don't remember when.

The ERIC category with the highest rate of use is ERIC microfiche. Nearly one-fourth (24.8%) of the U.S. education population[1] report having used ERIC microfiche at some time in the past. In other words, we estimate

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[1] "U.S. Education Population" for purposes of this survey includes 1,800,680 individuals, distributed as follows: 1,626,487 practitioners; 130,506 administrators; 43,687 academics and consultants. See Appendix E for details.

Table 6.11 Awareness and Use of ERIC Products and Services Among the U.S. Education Population

ERIC Product or Service (RQ3P1 through RQ3P8)	Not Aware (%)	Aware but Never Used (%)	Used (%)	No Response (%)	Row Total (%)
1. Resources in Education (RIE)	67.0	11.1	19.5	2.4	100.0
2. Current Index to Journals in Education (CIJE)	68.2	7.6	22.2	2.0	100.0
3. Computer Searching of ERIC	72.1	15.3	11.1	1.6	100.0
4. ERIC Microfiche	62.6	10.8	24.8	1.7	100.0
5. ERIC Printed Report	69.5	12.2	16.6	1.7	100.0
6. ERIC Printed Bibliography	73.1	11.4	13.8	1.7	100.0
7. ERIC Referral Services	75.9	15.3	5.5	3.3	100.0
8. Other ERIC Products or Services	97.4	1.1	1.6	0.0	100.0

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

that approximately 450,000 individuals in the U.S. education population today report having used ERIC microfiche some time in the past. The ERIC product with the next highest reported use is Current Index to Journals in Education (CIJE), use of which is reported by 22.2% of the education population.

Substantial differences arise, however, when we examine use by each of the three major population categories, as displayed in Table 6.12. Here we see that, for all the ERIC products and services listed, academics and consultants have the highest rate of use. Except for "ERIC Referral Services" and "Other ERIC Products or Services", we see that more than one half of the academics and consultants report having used RIE, CIJE, ERIC computer searching, ERIC microfiche, and ERIC printed reports and bibliographies.

But academics and consultants make up only about 2.4 percent of the total U.S. education population, as defined here. The largest single category is composed of educational practitioners (teachers, principals, and school librarians); altogether, "practitioners" make up approximately 90 percent of the total population studied. Here, the relative incidence of use is less than both the Administrator and Academics & Consultants categories. For example, consider "computer searching of the ERIC database". Nearly three-fifths (59.4%) of Academics and Consultants have used this, while only 8.5 percent of Practitioners have. However, comparing the actual sizes of these population categories, we estimate that approximately five times as many educational Practitioners have used ERIC computer searching as educational Academics and Consultants.[1] This is true for all the particular ERIC products and services listed; even though proportionally fewer Practitioners have used ERIC than Academics and Consultants, the actual number of users among the Practitioners is greater. Using these numbers as comparisons, we conclude that educational Practioners, the majority of whom are teachers and principals in primary and secondary schools, constitute ERIC's largest user group within the U.S. educational community.

We also asked Education Population Survey respondents about their awareness and use of the 16 ERIC Clearinghouses. Results from this question

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[1] (.085 x 1,626,487) ÷ (.594 x 43,687) = 5.3

Table 6.12 Use of ERIC Products and Services by Population Category

ERIC Product or Service (RQ3P1 through RQ3P8)	Percent of Practitioners who report using[1] ERIC (n=1,626,487)	Percent of Administrators who report using ERIC (n=130,506)	Percent of Academics & Consultants who report using ERIC (n=43,687)
1. Resources in Education (RIE)	17.2	33.4	60.8
2. Current Index to Journals in Education (CIJE)	20.5	32.8	55.6
3. Computer Searching of ERIC	8.5	26.4	59.4
4. ERIC Microfiche	22.1	46.3	62.9
5. ERIC Printed Report	13.4	41.3	63.3
6. ERIC Printed Bibliography	10.7	38.1	56.8
7. ERIC Referral Service	4.2	16.9	20.3
8. Other ERIC Products or Services	1.5	0.2	6.6

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

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[1] "Use" is defined as used "during past 4 weeks", "during past 12 months", "over 12 months ago", or "used but don't remember when".

are displayed in Table 6.13. Respondents were asked both about their awareness of and contacts with ERIC clearinghouses. We have marked with an asterisk (*) those clearinghouses where the total percent responding "aware" and "contacted" totals 30 percent or more. These are the following:

Name of Clearinghouse	Percent Aware of or Having Contacted
Elementary & Early Childhood Education	45.1%
Tests, Measurement, & Evaluation	37.5%
Handicapped & Gifted	32.9%
Reading & Communication Skills	32.1%

In all cases, however, "awareness" substantially exceeds actual contact with the Clearinghouse. (In addition, when Clearinghouse awareness is broken down by population category, in all cases Academics & Consultants are proportionally more aware of the existence of individual clearinghouses, even though the actual number of "aware" Practitioners always exceeds the actual number of "aware" Academics & Consultants.)

Table 6.13 Awareness and Use of ERIC Clearinghouses Among the U.S. Education Population[1]

Name of ERIC Clearinghouse (RQ2P1 through RQ2P16)	Not Aware (%)	Aware but Not Contacted (%)	Have Contacted (%)	No Response (%)	Row Total (%)
1. Adult, Career, & Vocational Education	76.9	19.7	1.4	2.0	100.0
2. Counseling & Personnel Services	74.4	22.7	1.0	2.0	100.0
3. Educational Management	76.8	17.2	2.8	3.2	100.0
4. Elem. & Early Childhood Ed.(*)	53.5	36.2	8.9	1.4	100.0
5. Handicapped & Gifted(*)	64.1	30.1	2.8	3.0	100.0
6. Higher Education	78.1	17.6	2.4	1.6	100.0
7. Information Resources	81.0	14.3	2.5	2.2	100.0
8. Junior Colleges	85.0	12.6	0.3	2.1	100.0
9. Languages & Linguistics	83.1	13.7	1.1	2.2	100.0
10. Reading & Communication Skills(*)	65.8	27.2	4.9	2.1	100.0
11. Rural Education & Small Schools	85.2	12.1	0.6	2.1	100.0
12. Science, Math., & Envir. Education	77.8	17.8	2.1	2.2	100.0
13. Social Studies, Soc. Sci., Ed.	75.7	20.3	1.2	2.7	100.0
14. Teacher Education	68.6	26.0	3.4	2.1	100.0
15. Tests, Measurement, & Evaluation(*)	60.4	31.5	6.0	2.1	100.0
16. Urban Education	84.6	10.8	0.4	4.3	100.0

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

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[1] Weighted population size upon which these percents are based is 1,800,680.

*"Aware but not contacted" and "have contacted" total 30% or more.

6.3.2 Characteristics of ERIC Users within the U.S. Educational Community

Elsewhere we describe ERIC users within the general U.S. education population in terms of three major categories: Practitioners, Administrators, and Academics and Researchers. In this section we address some of the individual and demographic characteristics of these users.

Table 6.14 displays the age, degree, employer type, job, and income of ERIC users and nonusers in the general U.S. educational population. In this case, a "user" is defined as anyone within the population surveyed who reported ever using one or more of the following:

- RIE
- CIJE
- ERIC Computer Search
- ERIC Microfiche
- ERIC Printed Document or Bibliography
- Other ERIC products or services
  (ERIC referral services, other ERIC products or services)

Table 6.14 displays the characteristics of ERIC users and nonusers. According to the data, younger individuals are more likely to have used ERIC than older individuals; 40.1 percent of those under 35 years of age have used ERIC, while only 14.7 percent of those 55 and over have used ERIC.

Approximately 53 percent of the population surveyed has a master's degree or higher, evidence of a very high degree of educational achievement within the population surveyed. Almost 90 percent (87.8%) of those with doctorates report having used ERIC, while only about 15 percent (14.8%) of those with a bachelor's degree report using ERIC. Less than half of those with master's degrees or master's degrees plus postgraduate work (45% and 44% respectively) report having used ERIC.

Those employed by colleges, universities, or state government agencies are very likely to have used ERIC; approximately three-fourths of the individuals employed by these institutions report having used ERIC.

Table 6.14 Reported ERIC Usage by Demographic Population Categories

Population Category	ERIC User? (%) Yes	No	Total
Age (RQ16) in Years			
1. Under 35 (n=621,241)	40.1	59.9	100.0
2. 35 to 44 (n=382,023)	37.1	62.9	100.0
3. 45 to 54 (n=527,863)	32.0	68.0	100.0
4. 55 and Over (n=252,511)	14.7	85.3	100.0
5. No Response (n=17,042)	0.0	100.0	100.0
Total (n=1,800,680)	33.2	66.8	100.0
Degree (RQ17)			
1. Bachelor's or less (n=790,088)	14.8	85.2	100.0
2. Master's (n=415,476)	45.0	55.0	100.0
3. Master's + Postgrad. (n=472,305)	44.0	56.0	100.0
4. Doctorate (n=80,969)	87.8	12.2	100.0
5. Other, No Response (n=41,842)	35.1	64.9	100.0
Total (n=1,800,680)	33.2	66.8	100.0
Employer or Primary Affiliation (RQ18)			
1. College or University (n=39,124)	75.8	24.2	100.0
2. State Agency (n=7,614)	76.5	23.5	100.0
3. Local School District (n=300,128)	45.2	54.8	100.0
4. Elementary School (n=1,345,385)	29.1	70.9	100.0
5. Secondary School (n=67,773)	41.1	58.9	100.0
6. Other, No Response (n=40,656)	15.7	84.3	100.0
Total (n=1,800,680)	33.2	66.8	100.0

(Table continued on next page)

Table 6.14 continued - Reported ERIC Usage by Demographic Population Categories

Population Category	ERIC User? (%) Yes	No	Total
Primary Job or School Function (RQ19)			
1. Administration, supervision, management or planning (n=273,834)	52.0	48.0	100.0
2. Research or evaluation (n=2,338)	100.0	0.0	100.0
3. Teaching, training, or counseling (n=1,370,285)	28.1	71.9	100.0
4. Information support (e.g., librarian, info. specialist) (n=47,221)	76.5	23.5	100.0
5. Student (n=75,408)	32.9	67.1	100.0
6. Other, No Response (n=31,594)	21.5	78.5	100.0
Total (n=1,800,680)	33.2	66.8	100.0
Income before Taxes (RQ20)			
1. $35,000 or more (n=45,287)	65.4	34.6	100.0
2. $30,000 to $34,999 (n=89,480)	37.6	62.4	100.0
3. $25,000 to $29,999 (n=132,388)	36.2	63.8	100.0
4. $20,000 to $24,999 (n=353,109)	45.6	54.4	100.0
5. $15,000 to $19,999 (n=493,900)	27.4	72.6	100.0
6. $10,000 to $14,999 (n=466,719)	29.3	70.7	100.0
7. $5,000 to $9,999 (n=139.200)	34.4	65.6	100.0
8. Under $5,000 (n=14,669)	15.5	84.5	100.0
9. Prefer not to answer (n=65,928)	3.8	96.2	100.0
Total (n=1,800,680)	33.2	66.8	100.0

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

Respondents were also asked to indicate their primary job or school function. "Teaching, training, or counseling" was indicated by the largest proportion of respondents, indicative of the large population of teachers covered by the survey. Of this group, slightly more than one-fourth (28.1%) report having used ERIC. All (100%) of those whose primary function was "research or evaluation" reported using ERIC. Interestingly, only about three-fourths (76.5%) who reported their primary function to be "information support" (libraries, information specialists, etc.) reported using ERIC; given the importance of this group in serving as "intermediaries" for ERIC, it might be useful to study this population in more detail in the future.

Finally, respondents were asked to indicate their annual income before taxes. It appears that those with annual incomes in excess of $20,000 per year are more likely to be ERIC users than those earning less, with 65.4 percent of those earning over $35,000 indicating they were ERIC users.

6.3.3 Recent ERIC Use by Members of the U.S. Education Community

As part of the Education Population Survey, respondents were asked to identify the ERIC product or service they had used most recently. Responses are displayed in Table 6.15. More than one-third (36.6%) reported that they used ERIC microfiche most recently. This differs somewhat by population category, however, with one-third (33.3%) of the Academics and Consultants reporting that they had used an ERIC computer search most recently. Overall, approximately equal percents reported having used RIE (15.0%) and CIJE (14.3%) most recently.

Table 6.16 displays how respondents used or applied the information they obtained from the ERIC product they used most recently. Almost half (48.5%) reported that they had used ERIC most recently "to support my study in a class I was taking". This is despite the vast majority of the population being surveyed being educational practitioners. In other words, even though most of the population surveyed are teachers, they say (57.3%) that their most recent use of ERIC was not for the purpose of supporting their own teaching but was to support their own classwork or study (we hypothesize that this use could have occurred either during graduate work in school or during continuing education or certification-related classes).

Those who reported using ERIC were also asked where they obtained physical access to the recently-used product or service. In Table 6.17 we see that about three-fourths (76.5%) obtained physical access to ERIC through a library or media center. About four-fifths (81.1%) of the Practitioners obtained ERIC through such channels. Only about half (55.4%) of the Administration obtained access via a library; about one-third (31.8%) of the Administrators obtained access via ERIC itself.[1] It appears that the higher awareness among Administrators and Academics & Consultants of the ERIC Clearinghouses also corresponds to a proportionately higher use of ERIC Clearinghouses for physical access to ERIC.[2]

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[1] This includes ERIC Clearinghouses, the ERIC Facility, or ERIC Document Reproduction Service (EDRS).

[2] The high proportion of physical access from libraries and ERIC Clearinghouses, as opposed to physical access via friends, colleagues, or teachers, appears to justify the concentration of the Requestor Population Survey upon physical access via ERIC access points.

Table 6.15 Type of ERIC Product or Service Used Most Recently by Population Category

ERIC Product or Service (RQ4)	Population Category (POPTYPE2)			
	Practitioners[1] (n=481,341)	Administrators[2] (n=84,056)	Academics & Consultants (n=31,644)	All Categories (n=597,041)
1. RIE	16.6%	8.2%	7.6%	15.0%
2. CIJE	16.1	4.4	12.0	14.3
3. ERIC Computer Search	7.5	14.1	33.3	9.8
4. ERIC Microfiche	37.4	40.0	15.5	36.6
5. ERIC Printed Doc. or Bib.	8.4	13.2	10.3	9.1
6. Other	3.7	0.0	6.0	3.3
7. Don't Know, no response	10.3	20.1	15.3	12.0
Total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

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[1] Includes teachers, principals, and school librarians.

[2] Includes school district staff and state education staff (intermediate agency staff may be included in both).

Table 6.16 How ERIC-Supplied Information was Used or Applied by Population Category

	Population Category (POPTYPE2)			
How ERIC-Supplied Information was Used or Applied[1]	Practitioners (n=481,341)	Administrators (n=84,056)	Academics & Consultants (n=31,644)	All Categories (n=597,041)
1. To support the teaching, training, or guidance of my own or someone else's students (Q9P1)	15.2%	5.2%	47.8%	15.6%
2. To support my study in a class I was taking (Q9P2)	57.3%	16.0%	0.0%	48.5%
3. To support my own research project (Q9P3)	33.8%	28.2%	55.3%	34.1%
4. To help plan, manage, administer or evaluate an organization's activities, (e.g., a school, school district, state agency, or other organization) (Q9P4)	11.7%	44.2%	19.4%	16.7%
5. I did not intend to use of apply the information myself since I was obtaining it for someone else's use (Q9P5)	0.0%	8.5%	2.9%	1.3%
6. I don't remember (Q9P6)	0.2%	0.5%	3.4%	0.6%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

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[1] Columns may total to more than 100% since multiple responses were possible.

Table 6.17 Description of Physical Access to ERIC by Population Category

Description	Population Category (POPTYPE2)			
	Practitioners (n=481,341)	Administrators (n=84,056)	Academics & Consultants (n=31,644)	All Categories (n=597,041)
Where did you obtain physical access to ERIC? (Q8)				
1. Did not obtain access	0.2%	0.1%	5.7%	0.5%
2. Teacher, professor, employer	2.6	0.0	0.0	2.1
3. Friend, colleague, fellow student	0.0	0.2	0.2	0.0
4. Library, media center, etc.	81.1	55.4	63.2	76.5
5. From ERIC[1]	9.4	31.8	23.7	13.3
6. Don't remember	0.5	0.0	0.2	0.4
7. Other, no response	6.3	12.5	6.9	7.2
Total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

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[1] Includes ERIC Clearinghouses, the ERIC Facility, or ERIC Document Reproduction Service (EDRS).

As shown in Table 6.18, anticipated repeat use of ERIC among users of all the products or services is substantial. All or nearly all respondents say they would be willing to use ERIC again. Interestingly, less than three-fourths (71.5%) of users of ERIC computer searches state they would be willing to use this service again; why anticipated future use of this ERIC service is somewhat lower than the others might be the topic of future research.

Table 6.18 Willingness to Use Same ERIC Product or Service Again

ERIC Product or Service Used Most Recently (RQ4)	Percent of Users Who Would be Willing to Use This Product or Service Again (Q15)
1. RIE (n=89,284)	86.1%
2. CIJE (n=85,128)	81.6%
3. ERIC Computer Search (n=58,252)	71.5%
4. ERIC Microfiche (n=218,428)	100.0%
5. ERIC Printed Document or Bibliography (n=54,584)	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

6.4 Description of ERIC Requests and Requestors

In this section we report the results of the Requestor Population Survey, a mail survey of individuals who recently requested ERIC products or services (RIE, CIJE, ERIC computer searches, or ERIC documents). Data are presented in two sections. In 6.4.1 we present data describing all requests. These data describe the individuals responsible for generating these requests as well as some of the circumstances surrounding these requests. Where appropriate, we also subdivide responses by the type of access point from which the ERIC product or service is obtained.

In Section 6.4.2 we present data describing requests involving only one ERIC product or service. We have done this while analyzing some questions in order to "home in" on responses which are not "contaminated" by reported use of other products or services. As will be seen in Section 6.4.1, however, the frequency with which ERIC products or services are used in combination is quite high, suggesting that it may be worthwhile in future analyses to take into account the different ERIC combinations which are used.

The reader should keep in mind the following two points when interpreting the data presented in the following sections. First, a "request" is not the same as a "requestor". That is, data in this section are presented in terms of requests; the actual number of individuals responsible for generating these requests may be substantially smaller than the number of requests, if repeat use is high.

Second, the weights calculated for projecting back the Requestor Population Survey results to the total population of requests as presented earlier in this section do not always yield the exact same totals as presented earlier; this is because some of the sampled access points, which contributed data to making annual usage estimates via the Screener and Primary surveys, were not completely represented in the Requestor Population Survey. Therefore, the reader should use the total usage figures presented earlier in Section 6 when describing the total usage of the ERIC system. However, we have used the weighted estimates derived from the Requestor Population Survey as table column headings in this section in order to be consistent when presenting the Requestor data.

6.4.1 Description of All ERIC Requests

6.4.1.1 Employer and Job Type of ERIC Requestors

An individual's job and employer type will, to a great extent, dictate the type and frequency of information requirements he or she generates. Since ERIC concentrates on providing educational information resources, it is useful to examine employer and job types in terms of whether those which are specifically teaching- or education-related are associated with higher utilization of ERIC.

Table 6.19 displays the (A) employer and (B) job type of individuals who generate ERIC requests in the U.S. Almost half (45.6%) of all the ERIC requests for RIE, CIJE, ERIC documents, or ERIC computer searches are generated by individuals employed by or affiliated with colleges or universities. About two-fifths (42.1%) of ERIC requests handled by the ERIC Clearinghouses and Facility are also generated by individuals affiliated with colleges or universities.

Perhaps most interesting are the differences between the requests handled by Academic and Other Access Points. About three-fifths (60.3%) of Academic Access Point requests are generated by individuals associated with colleges or universities. Only about 13.8 percent of Other Access Point requests are generated by such individuals. Instead, individuals associated with state agencies, local school districts, elementary schools, and secondary schools together account for about three-fifths (62.2%) of Other Access Point ERIC requests. This near-reversal in percentages points out the differences in the populations served by these two groups of access points.

Examining "primary job or school function" as displayed on the right-hand side of Table 6.19, we see that the majority of ERIC requests are generated by individuals whose primary job or school function is "student" (34.4%), with about as many reporting "teaching, training, or counseling" (29.0%) as their primary function. Very interestingly, almost a quarter (24.4%) of requests handled by Other Access Points are generated by individuals who classify their primary function as "information support", suggesting

Table 6.19 Employer and Job Type of ERIC Requestors by Type of Access Point

Variable	ERIC Clearing-houses & Facility (n=143,400)	Academic Access Points (n=1,764,500)	Other Access Points (n=803,550)	All Access Points (n=2,711,450)
	Type of Access Point (NEWTYPE2)			
A. Employer or Primary Affiliation (RQ22)				
1. College or University	42.1%	60.3%	13.8%	45.6%
2. State Agency	0.8	2.5	25.2	9.1
3. Local School District	5.2	2.9	26.7	10.1
4. Elementary School	3.8	10.5	5.9	8.8
5. Secondary School	5.5	6.5	4.5	5.9
6. Other, no response	42.5	17.2	24.0	20.6
Total	99.9%	99.9%	100.1%	100.1%
B. Primary Job or School Function (RQ23)				
1. Admin., superv., mgt., planning	19.7%	8.3%	34.0%	16.5%
2. Research, evaluation	22.3	6.5	4.7	2.9
3. Teaching, trng., couns.	16.1	28.1	33.4	29.0
4. Info. support	11.6	9.5	24.4	14.1
5. Student	23.6	49.5	3.0	34.4
6. Other, no response	6.6	4.1	0.5	3.2
Total	99.9%	100.0%	100.0%	100.1%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

NOTE: Columns may not total to 100% due to rounding errors.

that Other Access Points may be involved in more ERIC "networking" activities than Academic Access Points.[1]

In Table 6.20, we have broken down employer and job type by ERIC category. The differences here are much less striking, for several possible reasons. First, many of the requests tabulated here involve more than one ERIC product or service, so the column labeled "RIE" actually covers requests for RIE by itself as well as requests for RIE in conjunction with other ERIC products or services. Second, we hypothesize that differences among ERIC users are accounted for less by the particular product or service used than by the physical access channel via which the ERIC product or service is provided. Nevertheless, this table does seem to provide some evidence that RIE and CIJE are more likely to be used in a college or university setting than ERIC searches or ERIC documents; that RIE and CIJE are slightly more likely to be used by students. We emphasize, however, that these should not be interpreted as cause and effect relationships. That is, it would be premature to state that RIE and CIJE have a special characteristic which makes them appeal to individuals, particularly students, associated with colleges and universities.

Based on these two tables, though, we can state that (a) Academic Access Points and Other Access Points do serve two different population types, and (b) that ERIC should not be perceived as an information system whose only audience is composed of "academics". A substantial proportion of ERIC requests are accounted for by individuals associated with state education agencies and school systems. Given this actual reported usage, then, it does appear that ERIC, at the least, does provide a substantial channel for delivering information to educational practitioners.

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[1] One example of this is the situation in which "linking agents" in a local school district feed information requests into an intermediate service agency or state education agency.

Table 6.20 Employer and Job Type of ERIC Requestors by ERIC Category

	ERIC Category (ERICTYPE)				
Variable	RIE (n=837,420)	CIJE (n=884,910)	Searches (n=197,690)	Documents (n=791,430)	All (n=2,711,450)
A. Employer or Primary Affiliation (RQ22)					
1. College or Univ.	61.6%	44.2%	35.3%	32.7%	45.6%
2. State Agency	4.0	7.9	11.8	15.3	9.1
3. Local School Dist.	8.9	7.9	17.4	11.9	10.1
4. Elementary School	4.0	15.1	10.2	6.4	8.8
5. Secondary School	2.3	8.1	9.5	6.2	5.9
6. Other, no response	19.3	16.7	15.7	27.4	20.6
Total	100.1%	99.9%	99.9%	99.9%	100.1%
B. Primary Job or School Function (RQ23)					
1. Admin., suprv., mgt., planning	20.1%	5.2%	30.8%	21.9%	16.5%
2. Research, evaluation	2.3	1.8	6.0	3.9	2.9
3. Teaching, trng., couns.	19.8	32.5	30.5	34.4	29.0
4. Info. support	6.9	18.9	11.2	17.0	14.1
5. Student	45.6	39.5	18.1	20.7	34.4
6. Other, no response	5.3	2.1	3.3	2.1	3.2
Total	100.0%	100.0%	99.9%	100.0%	100.1%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

NOTE: Columns may not total to 100% due to rounding errors.

6.4.1.2 Age, Income, and Educational Degree of ERIC Requestors

Table 6.21 displays the age, income, and degree of ERIC requestors. These are very basic demographic statistics which allow us to describe the similarities and differences among the requestors served by the various access points.

More than three-fourths (78.6%) of ERIC requests are accounted for by individuals under 45 years of age, with 57.6 percent accounted for by individuals under 35, and 33.9 percent by those under 25. Requestors who use Academic Access Points tend to be younger, with nearly half (47.5%) of ERIC requests channelled through these access points; this is presumably because of the large number of students who use college and university libraries.

About half of ERIC requests (47.4%) are generated by individuals with a bachelor's degree or less. More than three-fifths (64.3%) of Academic Access Point requests are generated by individuals with a bachelor's degree or less. Almost half (44%) of ERIC requests are accounted for by individuals earning $10,000 per year or less. Individuals generating Other Access Point requests tend to be higher paid than individuals using the other types of access points, with about half of the requests via Other Access Points (50.2%) being generated by individuals making $20,000 or more per year.

6.4.1.3 Purpose for which ERIC is Used

As noted earlier in the Conceptual Framework of this study, the purpose for which information is sought and used can be thought of as being related to the value (to the individual, to society) of the information which is obtained, as well as to the potential access channels which might be employed to gain access to that information. People may be more willing to devote more of their time and energy to end-use goals which they value highly. Alternately, an information system (such as ERIC) might be evaluated on the basis of whether or not it is used for the purposes for which it was designed. We need to determine, at the least, whether ERIC is, in fact, used to further educational

Table 6.21 Age, Academic Degree, and Annual Income of ERIC Requestors by Type of Access Point

Characteristic	Type of Access Point (NEWTYPE2) ERIC Clearinghouses & Facility (n=143,400)	Academic Access Points (n=1,764,500)	Other Access Points (n=803,550)	All Access Points (n=2,711,450)
Age in Years (RQ20)				
1. Under 25	9.0%	47.5%	8.6%	33.9%
2. 25-34	36.2	18.6	32.7	23.7
3. 35-44	22.8	14.8	34.3	21.0
4. 45-54	25.4	9.4	19.0	13.1
5. 55 and over	5.0	8.4	5.3	7.3
6. No response	1.5	1.2	0.0	0.9
Total	99.9%	99.9%	99.9%	99.9%
Degree (RQ21)				
1. Bachelor's or less	25.1%	64.3%	13.8%	47.4%
2. Master's	19.0	6.5	25.2	12.7
3. Master's + Postgrad.	34.8	16.8	47.0	26.7
4. Doctorate	20.1	11.3	13.9	12.5
5. Other, No Response	1.0	1.1	0.0	0.8
Total	100.0%	100.0%	99.9%	100.1%
Income before Taxes (RQ24)				
1. $30,000 or more	15.2%	2.7%	24.8%	9.9%
2. $20,000 to $29,999	29.0	18.9	25.4	21.3
3. $10,000 to $19,999	22.2	20.7	34.6	25.0
4. Under $10,000	25.9	51.3	11.8	38.3
5. No response	7.7	6.5	3.4	5.7
Total	100.0%	100.1%	100.0%	100.2%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

practice in the United States. As we have already seen, a substantial proportion of ERIC usage is accounted for by people involved with education, either because they are students themselves, or because they are employed by or affiliated with an institution whose primary function is educational in nature.

Table 6.22 displays the responses broken down by type of access point. Nearly half (49.6%) of requests are generated by people who state[1] they used or applied ERIC "To support my own research project". Almost as many requests are generated by those who use ERIC "To support my studying in a class I was taking". (We attribute differences between the distribution of responses here and for the Education Population Survey to the differences of the populations under study; the Education Population Survey was targeted at individuals who were practitioners, administrators, or researchers in the U.S. educational community; the Requestor Population Survey made no such distinction.)

It appears that ERIC information obtained through Other Access Points is more likely to be used "To help plan, manage, administer, or evaluate an organization's activities". This corresponds to the high proportion of administrators using Other Access Points and demonstrates that ERIC's impact is felt not only by the student or the classroom teacher but also by decisionmakers within the educational community. Also, more than a fifth (23.9%) of Other Access Point requests are accounted for by people who obtained ERIC for someone else. Interestingly, about equal proportions of requests via Academic Access Points (25.6%) and Other Access Points (25.1%) are used "To support teaching, training, or guidance".

In Table 6.23, responses to the "purpose of use" question are subdivided by the type of ERIC product or service used. Keeping in mind our earlier caveat concerning the combinations of ERIC which are actually covered here, it appears that RIE and CIJE are alike in that the highest proportions

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[1] The question was worded as follows: "Which of the following categories best describe how you used or applied (or intended to use or apply) the information obtained from the ERIC product or service specified on the ERIC Request Card? (CIRCLE CODE NUMBERS OF ALL THAT APPLY.)"

Table 6.22 Percent of Requests by Purpose of Use and Type of Access Point

Purpose of Use[1]	Type of Access Point (NEWTYPE2) ERIC Clearinghouses & Facility (n=143,400)	Academic Access Points (n=1,764,500)	Other Access Points (n=803,550)	All Access Points (n=2,711,450)
1. To support teaching, training, or guidance of my own or someone else's students (Q1P1)	14.9%	25.6%	25.1%	24.9%
2. To support my studying in a class I was taking (Q1P2)	33.0%	54.7%	19.5%	43.1%
3. To support my own research project (Q1P3)	42.6%	52.2%	45.1%	49.6%
4. To help plan, manage, administer, or evaluate an organization's activities (Q1P4)	23.7%	12.7%	38.4%	20.9%
5. I did not intend to use or apply the information myself since I was obtaining it for someone else's use (Q1P5)	9.1%	5.1%	23.9%	10.9%
6. Other (Q1P7)	6.0%	0.1%	0.3%	0.4%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

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[1] Percents may total to more than 100% since multiple uses are possible.

Table 6.23 Percent of Requests by Purpose of Use and ERIC Category

Purpose of Use[1]	ERIC Category (ERICTYPE) RIE (n=837,420)	CIJE (n=884,910)	Searches (n=197,690)	Documents (n=791,430)	All (n=2,711,450)
1. To support teaching, training, or guidance of my own or someone else's students (Q1P1)	29.9%	27.6%	25.2%	16.4%	24.9%
2. To support my studying in a class I was taking (Q1P2)	61.4%	46.1%	23.1%	25.5%	43.1%
3. To support my own research project (Q1P3)	50.5%	40.3%	48.0%	59.4%	49.6%
4. To help plan, manage administer, or evaluate an organization's activities (Q1P4)	11.1%	22.8%	27.4%	27.6%	20.9%
5. I did not intend to use or apply the information myself since I was obtaining it for someone else's use (Q1P5)	5.1%	11.1%	7.5%	17.6%	10.9%
6. Other (Q1P7)	0.7%	0.2%	1.4%	0.2%	0.4%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

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[1] Percents may total to more than 100% since multiple uses are possible.

of respondents for these products cite "To support my studying in a class I was taking" as a purpose of use. Under ERIC searches and ERIC documents, however, the largest proportions of responses are for "To support my own research project". Despite this, however, we do not interpret these data as suggesting substantial differences in the ways the different ERIC products and services are used. If such a distinction can be made, it should probably be made for ERIC documents, since ERIC documents (microfiche and papercopy) present much of the information which is intellectually accessed through RIE and ERIC computer searches. Here we see that nearly three-fifths (59.4%) of ERIC document requests are accounted for by people who intend to use them to support their own research project.

6.4.1.4 Characteristics of ERIC Requests

Three request characteristics described here are (a) whether the Thesaurus of ERIC Descriptors was used to help respond to the request, (b) how the access point received the request, and (c) how the response to the request was delivered.

Thesaurus use is important since the Thesaurus provides access to the controlled educational vocabulary used throughout the ERIC system to support functions ranging from document input to document retrieval. While free-text searching via online systems may place less demand upon searchers to have prior access to the Thesaurus, controlled vocabulary searching is still widely used, and is still extremely important when searching via RIE and CIJE.

How requests are received and responded to by ERIC access points is an important consideration. First, it is partially determined by the nature of the centrally-produced ERIC products and services; after all, substantial output from an online search cannot be delivered orally over the phone to a requestor. Second, the channels used for delivering ERIC products and services are partially determined by custom and the fact that a substantial proportion of ERIC access points are libraries, which traditionally provide information services on a walk-in or person-to-person basis.

One thing should be noted about the following tables. As will be shown in a following section, many of the ERIC requests reported here actually involve the use of more than one ERIC product or service. Thus, Thesaurus use is not necessarily uniquely tied to the use of one ERIC product in isolation from others.

In Table 6.24 we see that nearly three-fifths (56.9%) of all ERIC requests involve some use of the ERIC Thesaurus. Use of the Thesaurus is highest among Academic Access Points (65.6% of requests) and lowest among ERIC Clearinghouse and Facility access points (3.5%). We assume that the figure is so low for the latter group since ERIC Clearinghouse staff are already highly familiar with the ERIC vocabulary.

Not surprisingly, most ERIC requests (77.9%) are received by access points in person, with the rest being received by telephone (9.7%), mail (5.9%) or via some other channel (5.5%).

ERIC Clearinghouses and Other Access Points make much heavier use of telephone and mail for receiving requests than do Academic Access Points. Less than one percent of ERIC requests are received by Academic Access Points via mail, whereas 30.1 percent and 26.0 percent of Clearinghouse and Other Access Point requests are received via mail.

Overall, about 80 percent (79.5%) of requests are responded to in person. Again, Academic Access Points are more likely to respond in person to ERIC requests than the other two access point types. Mail is used very often by ERIC Clearinghouses and Other Access Points, presumably because responding to an ERIC request often involves supplying a document of some sort.

As shown in Table 6.25, use of the ERIC Thesaurus differs somewhat by ERIC category, with ERIC computer searches most often (85.4% or requests) involving Thesaurus use.

ERIC Computer Searches is the ERIC category whose requests are received and responded to most often by mail. Almost one-fourth (22.8%) of

Table 6.24 Percent of Requests by Request Characteristic and Type of Access Point

Request Characteristic	Type of Access Point (NEWTYPE2)			
	ERIC Clearinghouses & Facility (n=143,400)	Academic Access Points (n=1,764,500)	Other Access Points (n=803,550)	All Access Points (n=2,711,450)
A. Percent of requests in which ERIC Thesaurus was used (RCQ2)	3.5%	65.6%	30.9%	56.9%
B. How was request received? (RCQ4)				
In Person	53.8%	95.4%	43.9%	77.9%
Telephone	30.1	0.6	26.0	9.7
Mail	15.6	0.3	16.5	5.9
Other	0.5	3.2	11.6	5.5
No Answer	0.0	0.5	2.1	1.0
Total	100.0%	100.0%	100.1%	100.0%
C. How was response delivered? (RCQ5)				
In Person	53.8%	95.1%	49.8%	79.5%
Telephone	19.4	0.0	1.8	1.6
Mail	24.5	1.1	29.4	10.7
Other	2.3	2.5	18.6	7.2
No Answer	0.0	1.2	0.4	0.9
Total	100.0%	99.9%	100.0%	99.9%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Primary Survey, Requestor Population Survey, 1981.

Table 6.25 Percent of Requests, by Request Characteristic and ERIC Category

Request Characteristic	ERIC Category (ERICTYPE)				
	RIE (n=837,420)	CIJE (n=884,910)	Searches (n=197,690)	Documents (n=791,430)	All (n=2,711,450)
A. Percent of requests in which ERIC Thesaurus Was Used (RCQ2)	60.3%	47.8%	85.4%	56.3%	56.9%
B. How was request received? (RCQ4)					
In Person	84.8%	92.8%	57.5%	59.2%	77.9%
Telephone	3.9	3.9	17.4	20.2	9.7
Mail	1.3	1.6	22.8	11.3	5.9
Other	8.7	0.1	1.4	9.3	5.5
No Answer	1.1	1.7	1.0	0.0	1.0
Total	99.8%	100.1%	100.1%	100.0%	100.0%
C. How was response delivered? (RCQ5)					
In Person	88.0%	93.4%	51.5	62.0%	79.5%
Telephone	2.5	2.0	0.1	0.5	1.6
Mail	3.4	2.2	39.3	20.9	10.7
Other	6.0	0.5	5.5	16.7	7.2
No Answer	0.0	1.9	3.7	0.0	0.9
Total	99.9%	100.0%	100.1%	100.1%	99.9%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Primary Survey, Requestor Population Survey, 1981.

ERIC computer search requests are received by mail, while almost two-fifths (39.3%) are responded to by mail.[1]

6.4.1.5 Use of Non-ERIC Information Sources

Here we are concerned not only with other non-ERIC documents but also with other persons, organizations, systems, and media which might also be used by ERIC requestors. Studies of the use of informal and person-to-person information sources among scientists and engineers have demonstrated the importance of such sources to these groups. As shown here, users of ERIC also demonstrate such usage.

Table 6.26 shows that three-fourths (75.4%) of ERIC requests also involve use of other, non-ERIC printed documents, such as books, articles, and reports. This is certainly not surprising since CIJE, ERIC computer searching, and to a lesser extent, RIE, all provide intellectual access to documents not available in the ERIC microfiche collection.[2]

About two-fifths (42.8%) of the ERIC requests involve use of other organizations or departments separate from the ERIC access point. Some of these other organizations were probably used for obtaining "non-ERIC" information. (But as we shall see further on, some of these other organizations may have been used for obtaining other ERIC products or services as well.)

About half (51.0%) of ERIC requests also involve use of experts knowledgeable in the area of the request, and about half (55.5%) involve the requestor's own friends, colleagues, students, or other personal acquaintances.

Other prerecorded audio or visual sources (i.e. records, cassettes, slides, etc.) are used in connection with only about 16 percent of ERIC requests, although they are more likely to be used in connection with requests handled by Other Access Points.

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[1] A possible future analysis of these data would be to compare users' satisfaction with searches handled in person versus those handled by mail; mail requests presumably involve much less searcher-requestor interaction during development of a search statement.

[2] However, we do not know for sure whether these other non-ERIC documents were, in fact, identified through use of ERIC.

Table 6.26 Percent of Requests in which Non-ERIC Information Sources Were Used, by Type of Access Point

Non-ERIC Information Source Used	Type of Access Point (NEWTYPE2)[1] ERIC Clearing-houses & Facility (n=143,400)	Academic Access Points (n=1,764,500)	Other Access Points (n=803,550)	All Access Points (n=2,711,450)
1. Other printed documents (i.e., books, articles, reports) (Q19P1)	77.6%	74.1%	77.9%	75.4%
2. Other organizations or departments separate from the one on the Request Card (i.e., other libraries, Clearinghouses, etc.) (Q19P2)	55.3%	37.9%	51.2%	42.8%
3. Experts or people knowledgeable in the area of my request (Q19P3)	52.2%	45.6%	62.4%	51.0%
4. My own friends, colleagues, students, or other personal acquaintances (Q19P4)	55.0%	51.3%	64.8%	55.5%
5. Prerecorded audio or visual sources (i.e., records, cassettes, slides, etc.) (Q19P6)	7.6%	10.2%	28.9%	15.6%
6. Other (Q19P7)	2.4%	0.9%	3.1%	1.7%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

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[1] Percents do not total to 100% since multiple responses were possible.

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These data obviously point out that ERIC is not used in isolation from other formal and informal non-ERIC information sources. This is true even in the field of education, where ERIC is only one of the many information systems available. One possible topic for future research might be to determine how ERIC compares with other information products and services in terms of its accessibility, ease of use, etc.

6.4.1.6 Use of Other ERIC Products and Services by ERIC Requestors

Just as ERIC requestors use non-ERIC information sources to satisfy their needs for information, it is also common for them to use more than one ERIC product or service to obtain relevant information. We have two sources of data for measuring the frequency with which this occurs. The first is the Primary Survey's ERIC Request Card; cooperating access point staff were asked to identify other ERIC products and services which were also used by the requestor. The other data source is the Requestor Population Survey questionnaire itself; survey respondents were asked to identify other ERIC information sources they had used to obtain information on the same topic or title specified on the ERIC Request Card, a copy of which was supplied with their questionnaire.

Data from these two sources are displayed in Table 6.27. Consistently, the requestors themselves report more ERIC usage than was reported by access point staff who were assigned to monitor a particular ERIC product or service. For example, in the Primary Survey, it was reported that CIJE was used in 29.7 percent of the cases where RIE was used. According to RIE users surveyed in the Requestor Population Survey, CIJE was used in twice as many cases. A similar relationship is shown for all four of the major ERIC categories. For example, of ERIC computer search requestors, Primary Survey data show RIE being used in 8.6 percent of the cases, while the Requestor survey shows RIE being used in 41.5 percent of the cases.

There are several possible explanations for these seeming discrepancies. The first is that the Primary Survey may tend to underreport use of ERIC products or services other than the ones access point staff were asked to

Table 6.27 Combined Use of ERIC Products and Services, as Reported in Primary Survey and Requestor Population Survey

Type of ERIC Request	Percent of these Requests Involving Use of the Following:	As Reported in Access Point Primary Survey	As Reported in Requestor Population Survey
RIE	CIJE	29.7%	61.0%
	ERIC Computer Search	23.5%	28.3%
	ERIC Microfiche	27.1%	71.8%
	ERIC Printed Report	1.5%	53.3%
	ERIC Printed Bibliography	0.6%	35.2%
CIJE	RIE	36.9%	50.8%
	ERIC Computer Search	17.9%	26.2%
	ERIC Microfiche	3.8%	49.2%
	ERIC Printed Report	0.1%	15.2%
	ERIC Printed Bibliography	1.9%	10.5%
ERIC Computer Search	RIE	8.6%	41.5%
	CIJE	7.9%	42.0%
	ERIC Microfiche	8.9%	63.8%
	ERIC Printed Report	0.6%	50.3%
	ERIC Printed Bibliography	0.8%	26.7%
ERIC Documents	RIE	36.9%	56.9%
	CIJE	11.5%	62.6%
	ERIC Computer Search	15.4%	48.1%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Primary Survey, Requestor Population Survey, 1981.

monitor, simply because not all products and services other than the ones access point staff were asked to monitor were within view of the employee who was assigned to perform ERIC monitoring. This is a common occurrence, especially when different ERIC products are located in different rooms or departments within the same organization. Another explanation, possibly more significant, is that ERIC usage may, in fact, "stretch" over an extended time period and may involve using ERIC products and services at different organizations. For example, we know that there are many more "RIE" access points than "ERIC computer search" access points. It is possible in some cases that RIE functions as a "feeder" to computer searching by making users aware of the existence of the data base thus leading them to awareness and use of computer searching subsequent to using RIE. This is one possible explanation for the high incidence of joint use of RIE and computer searching.[1]

A possible source of the difference between the Primary Survey and Requestor Survey results is that individuals who responded to the Requestor Survey overestimated their use of other ERIC products or services, or they reported additional uses of ERIC at access points other than the one which recorded their request via an ERIC Request Card.

Probably the "truth" about joint use of ERIC products and services is somewhere between the results of the Primary Survey and the results of the Requestor Population Survey. The Primary Survey may simply underestimate use of other products or services since they could not always be monitored by the access point staff member who was only, in most cases, assigned to monitor only one product or service. The Requestor Population Survey may overestimate since it is always possible that an ERIC user of, say, CIJE, may have thought that the ERIC database was being searched even though other related databases were being searched.[2]

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[1] Another possible explanation of the high incidence of joint use of RIE and ERIC computer searching is that RIE is limited to the ERIC bibliographic database, whereas computer searching is not.

[2] One interesting question is how frequently computer searching access points call themselves an "ERIC search service" in their promotional literature even though ERIC is only one of the databases they search.

Nevertheless, it is clear from these data that the use of different ERIC products and services in combination when searching for information may be the rule, rather than the exception. Such use of ERIC may simply be very strong evidence that ERIC products and services are related to each other even though each performs a different function.

Perhaps a more significant interpretation of these data is that a market may exist for an ERIC product which combines both identification and access functions in one package. For example, systems are currently under development which combine videodisc technology with telecommunications channels. It may be that ERIC would be a prime candidate to take advantage of such technology, perhaps via a joint venture with private industry.

6.4.2 Use of ERIC Products and Services by Themselves

We saw in the previous section how frequently joint use of ERIC products and services occurs. We felt that some of the questions in the Requestor Population Survey questionnaire were better analyzed only for those respondents who used one product or service at the monitoring access point. We did this so that usage of RIE, CIJE, computer searching, or ERIC documents could, in fact, be isolated as much as possible. The disadvantage of this approach is that not all Requestor Population Survey respondents are included in the following tables. The advantage is, we feel, that responses to these few questions can be analyzed more reliably.

6.4.2.1 Prior Awareness of ERIC and Means of First Awareness of ERIC

Table 6.28 shows that most ERIC requestors were already aware that the type of ERIC product or service they used existed. Almost all of the document requestors (98.5%) were already aware of the existence of ERIC documents, while nearly 80 percent of search requestors were already aware of ERIC computer searching. CIJE had the lowest prior awareness, with only 58.3 percent having prior awareness of this ERIC product.

Table 6.28 Prior Awareness of ERIC and Method of Initial Awareness

Variable	ERIC Category (ERICTYPE)			
	RIE (n=242,480)	CIJE (n=513,700)	Searches (n=170,580)	Documents (n=421,950)
A. Percent of requestors who were aware of the ERIC product or service prior to the date on the ERIC Request Card (Q2)	65.4%	58.3%	79.1%	98.5%
B. Method of first awareness (RQ4)				
1. Teacher, professor, employer	56.8%	42.5%	34.0%	54.5%
2. Friend, colleague, fellow student	5.1	13.3	14.5	6.6
3. Staff at library, media center, clearinghouse, etc.	30.4	29.0	27.3	9.6
4. Found out by myself while doing research in library, media center, clearinghouse, etc.	0.0	13.0	2.8	2.5
5. Other	4.1	2.2	20.4	26.8
6. No response	3.6	0.0	1.0	0.0
Total	100.0%	100.0%	100.0%	100.0%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

Most requestors initially found out about ERIC from a teacher, professor, or employer. Given the substantial proportion of ERIC use accounted for by those involved in a research project or class study, we feel safe in assuming that the majority of this prior awareness came from experience while in school.

The next most frequently used channel for awareness is the staff of libraries, media centers, information centers, and clearinghouses. And according to these data, a relatively small proportion found out about ERIC on their own. We conclude that people need to be introduced to ERIC by teachers or library staff. The frequency of awareness from other sources is relatively low. (We note that, for ERIC documents, 14.1 percent of prior awareness comes from reading journals, magazines, or newsletters, included here under "other".

6.4.2.2 Description of ERIC Requests and their Outcome

Information-seeking sometimes has been viewed as one of the behaviors engaged in by people who are trying to make a decision or solve a problem. We have already seen what types of purposes people have in seeking ERIC information, e.g., class study, management, research, etc.

These factors have an impact on the type of information people seek. We describe the types of information people seek in the following tables.

First, Table 6.29 demonstrates how ERIC products and services are used in terms of whether or not the requestors had specific authors or documents in mind when using ERIC. In a majority of cases, ERIC requestors do not have specific authors or documents in mind; instead, they are searching for information on a specific topic. It does appear, however, that RIE and ERIC documents, possibly used together, are used by people seeking specific authors or document titles more often than CIJE or ERIC searching. (It may be that the image of RIE and its association with ERIC documents lead people to believe that RIE documents are narrower, subject-wise, than the "open literature" accessible through CIJE and ERIC computer searches.)

Table 6.29 Description of Request and Its Outcome by ERIC Category

	ERIC Category (ERICTYPE)			
Category	RIE (n=242,480)	CIJE (n=513,700)	Searches (n=170,580)	Documents (n=421,950)
A. Goal of Request (Q6)				
1. I had specific authors or documents in mind	30.3%	2.4%	4.1%	34.5%
2. I was searching for information on a specific topic	61.0	94.7	90.7	49.9
3. Both of the above	3.3	2.9	4.7	15.3
4. Neither of the above	1.7	0.0	0.0	0.1
5. No response	3.6	0.0	0.5	0.3
Total	99.9%	100.0%	100.0%	100.1%
B. Request Outcome (Q8)				
1. No relevant documents identified	6.4%	10.3%	11.3%	27.0%
2. Did not need to obtain access to these documents	5.5	0.0	4.3	20.1
3. Have not yet tried to obtain access to the identified documents	3.3	0.0	22.2	0.7
4. Have obtained access to none of the documents even though I have tried	0.0	5.1	3.4	0.0
5. Have obtained access to some of the documents	8.8	38.6	19.8	7.0
6. Have obtained access to most of the documents	43.0	25.0	26.2	14.9
7. Have obtained access to all the documents	28.2	20.9	9.2	30.1
8. Other	0.0	0.0	0.8	0.0
9. No response	4.9	0.0	2.8	0.3
Total	100.1%	99.9%	100.0%	100.1%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

When asked about request outcomes, most respondents report having obtained access to "some", "most", or "all" of the documents they identified. However, larger proportions of users of RIE and CIJE than ERIC searches and ERIC documents report obtaining "some", "most", or "all" of the documents they identified; these results may be due just as much to the nature of the products themselves (i.e., people may not usually use ERIC documents to help identify other documents) as to the time delay (i.e., some respondents may have received their questionnaires before they had sufficient time to fully inspect and utilize their search output).

Nevertheless, these results for RIE and CIJE certainly demonstrate that a majority of ERIC requestors do succeed, at least partially, in obtaining access to the documents which ERIC identifies for them.

Table 6.30 further describes ERIC usage in terms of whether ERIC helps requestors identify non-document information sources.

The products and services seem about equally successful in this, identifying non-document information sources. This is important when evaluating an information system, since the documents which an information system identifies may not by themselves provide the information which the individual user is seeking. For example, twenty percent of the document requestors report that their ERIC documents supplied them with "...the names of individuals who could be contacted for additional information", and almost one-third (31.3%) of document requestors stated that ERIC documents supplied them with "...names of organizations which could be contacted for further information".

Aside from the numbers presented in these preceding tables, three ideas should be readily apparent to the reader.

First, ERIC users do appear to have success in obtaining the documents which ERIC helps them to identify. In this respect, the ERIC system appears to be a success.

Second, ERIC documents themselves help users identify further sources of information. Thus, it would be a mistake to view the identification and provision of ERIC documents as the sole output of RIE and ERIC microfiche collections.

Table 6.30 Identification of Information Sources Other than Documents by ERIC Category

Category	RIE (n=242,480)	CIJE (n=513,700)	Searches (n=170,580)	Documents (n=421,950)
A. Has the information you obtained from this ERIC product or service helped you identify any information sources other than documents which are useful or relevant? (Q9)				
Yes	46.6%	38.7%	49.0%	40.2%
No	44.7	41.5	37.7	27.2
Don't know	0.0	13.8	9.7	30.9
No response	8.8	6.0	3.6	1.6
Total	100.1%	100.0%	100.0%	99.9%
B. Other Sources Identified[1] (Q10P1 - Q10P4)				
1. Names of individuals who could be contacted for additional information	18.9%	12.0%	17.6%	20.5%
2. Names of organizations which could be contacted for further information	34.0%	22.6%	31.6%	31.3%
3. Names of programs or projects	42.7%	32.0%	37.2%	33.1%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

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[1] Multiple responses possible.

Third, ERIC appears to be quite successful in providing users with leads to "non-document" information sources. We think that this is an interesting finding since one of the justifications for developing special-purpose clearinghouses, information analysis centers, and special consultant or project files is to provide information-seekers with more than just documents. Yet, here we find that document-based ERIC products and services are being used just for that purpose. Again, we strongly recommend that information systems such as ERIC not be evaluated exclusively in terms of their ability to locate and provide documents; such a viewpoint would be limiting.

6.4.2.3 Number of Documents Identified

Still, a major function of the ERIC system is to help individuals locate documents. We asked requestors (A) how many documents they hoped to identify, (B) how many documents they actually identified, and (C) how many documents they actually expected to be relevant. Responses are displayed in Table 6.31.

It is quite apparent that people who request ERIC computer searches have the highest expectations, with a mean of 37.8 documents the requestors hoped to identify. It is also clear that people who request ERIC computer searches also retrieve the largest number of relevant documents, with a mean of 22.8 relevant documents actually identified. Unfortunately, we do not know how many of these retrieved and relevant documents are actually "ERIC" documents since we know from the Access Point Screener Survey that a substantial proportion of ERIC database searches are conducted in conjunction with other databases.

6.4.2.4 Satisfaction with ERIC

We asked respondents to rank their satisfaction with ERIC in two ways. First, we asked them to rank their "overall satisfaction" with ERIC on

Table 6.31 Number of Documents Identified through Using ERIC by ERIC Category and Type of Document

ERIC Category (ERICTYPE)		Average Number of Documents... the requestor hoped to identify (Q7A)	the requestor actually identified (Q7B)	the requestor expected to be relevant (Q7C)
RIE	mean	8.8	13.1	8.6
	s.d.	6.6	15.2	12.6
CIJE	mean	9.2	7.8	7.2
	s.d.	5.2	6.9	6.0
Searches	mean	37.8	50.0	22.8
	s.d.	40.0	79.6	33.5
Documents	mean	12.3	7.9	6.3
	s.d.	19.2	12.9	11.7

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

NOTE: "s.d." = "standard deviation"

a 1-to-5 scale. We also asked them to rank ERIC in terms of five qualitative attributes:

- relevance
- completeness
- practicality
- appropriateness
- newness

All attributes were defined as unambiguously as possible. Definitions and tabulations of results are displayed in Table 6.32.

Overall, more than three-fourths of respondents stated they were "highly satisfied" or "somewhat satisfied" with the ERIC product or service which they used.

In terms of the individual attributes, a majority of respondents rank ERIC products as a 4 or 5 on a 1-to-5 scale, with 1 being low and 5 being high. We were particularly interested in how requestors ranked ERIC in terms of its practicality, which was defined as:

> "...degree to which the ERIC product or service provided you with or directed you to information which was practical or immediately useable for your needs."

Evidently, ERIC requestors feel that the information supplied to them is practical, since, for example, nearly three-fourths (72.6%) of RIE requestors stated that the information supplied by RIE ranked a 4 or 5 on the "practicality" scale.

Based on these results, we conclude that a majority of ERIC requestors are satisfied with ERIC.

Table 6.32 Qualitative Evaluation of ERIC Products and Services by ERIC Category and Evaluation Attribute

Evaluation Attribute	ERIC Category (ERICTYPE)			
	RIE (n=242,480)	CIJE (n=513,700)	Searches (n=170,580)	Documents (n=421,950)
A. Relevance (Q13P1)[1,2]	66.7%(22.8%)	67.3%(25.2%)	57.3%(23.1%)	65.8%(21.0%)
B. Completeness (Q13P2)[1,3]	59.1%(24.9%)	59.1%(15.4%)	54.9%(21.8%)	47.2%(11.3%)
C. Practicality (Q13P3)[1,4]	72.6%(44.9%)	61.3%(25.2%)	59.0%(20.2%)	59.8%(25.6%)
D. Appropriateness (Q13P4)[1,5]	61.2%(21.8%)	59.2%(37.5%)	56.8%(26.4%)	60.1%(20.4%)
E. Newness (Q13P5)[1,6]	69.5%(38.9%)	47.7%(20.7%)	47.2%(20.3%)	56.2%(10.6%)
Overall Satisfaction (Q11)[7]	88.6%(35.3%)	76.2%(32.1%)	80.4%(43.1%)	73.1%(48.4%)

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

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[1] The percents in the column are the percentages of respondents who rated the ERIC product or service "4" or "5" on a 1-to-5 "low-to-high" scale. Percents in brackets, ( ), are for those who supplied a ranking of 5 (high) only.

[2] Relevance (degree to which the ERIC product or service provided you with or directed you to information directly related to the title or topic of your request).

[3] Completeness (degree to which the ERIC product or service provided you with or directed you to all the information you needed).

[4] Practicality (degree to which the ERIC product or service provided you with or directed you to information which was practical or immediately useable for your needs).

[5] Appropriateness (degree to which the ERIC product or service provided you with or directed you to information which was presented at a technical level or level of detail which was appropriate to your needs).

[6] Newness (degree to which the ERIC product or service provided you with or directed you to information about which you were previously unaware).

[7] Percent is the percent responding "highly satisfied" or "somewhat satisfied". Percent in brackets, ( ), is the percent responding "highly satisfied" only.

SECTION 7

THE COSTS OF THE ERIC SYSTEM

Cost analyses of the ERIC System were performed to identify the magnitude of expenditures associated with the production, distribution and use of ERIC products and services and various component costs. The methodology used in developing ERIC System Costs, which is described in Appendix A, was based on identifying costs of the ERIC system participants according to the product or service and the generic function involved. For some participants, such as the Clearinghouses, total costs were available and needed only to be allocated among the products and services and functions. Other participant costs were estimated from those of a sample of the particular group of interest, and some were developed using ERIC system parameters and generalized cost models of particular activities.

Planning for cost analysis began with the specification of system participants, products and services, and functions to be considered. Those chosen are shown in Figure 7.1 and have been described earlier in Section 2. Also specified at this point were specific activities performed by each participant and relevant cost factors.

Several conventions and underlying assumptions must be kept in mind in considering the cost results presented in this report. The first of these concerns the treatment of expenditures for ERIC products and services — especially subscriptions to RIE and CIJE, computer search charges, and document purchases. Incurred generally by access points, these expenditures are reimbursements for costs incurred by ERIC. To avoid double counting, then, purchase costs were not included in access point totals. These figures are available if needed for consideration of access point activity.

A second convention followed in costing involved the allocation of generation costs between RIE or CIJE and computer searches. While it is the general practice in the industry to allocate generation costs to the printed

Figure 7.1. ERIC System Participants, Products and Services and Functions

Participants	Products and Services	Functions
Document Providers	RIE	Generation
ERIC	CIJE	Reproduction and Distribution
- Clearinghouses		
- Facility	Computer Search	
- EDRS		Acquisition and Processing
- GPO	Documents	
- ORYX		
		User Support
Access Points		
		Identification
Data Base Processors		
		Assimilation
Users		

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

secondary product and only marginal costs of tape production to computer tapes, we have chosen here to allocate generation costs between the printed RIE or CIJE and computer searches. The allocation chosen is on the basis of the relative number of uses of each product as reported in Section 6. Other allocation methods chosen which also have an impact on the distribution of ERIC costs include the assignment of administrative and overhead costs for each participant on the basis of direct costs associated with particular products/ services and functions.

There would appear to be substantial foreign use of the ERIC system, with 15 percent of RIE subscriptions, and seven percent of ERIC document purchasers coming from outside the U.S. This study was addressed solely to U.S. access points and users, and so must underestimate both use and associated costs. Generation and reproduction costs given are exhaustive and do not exlude those associated with foreign distribution.

The end result of the cost analyses of the ERIC system reflects costs expended in 1979 on the production, distribution and use of ERIC products and services in the U.S. The total figure is nearly $160 million, with nearly two-thirds of this associated with the time spent by users of the ERIC system. Sections which follow describe the ERIC system costs according to breakdowns by participant (Section 7.1), product or service (Section 7.2), and function (Section 7.3). These sections highlight the general results of the cost data collection and suggest areas for further exploration. More detailed cost data are available for such analyses in the King Research files.

7.1 ERIC System Participant Costs

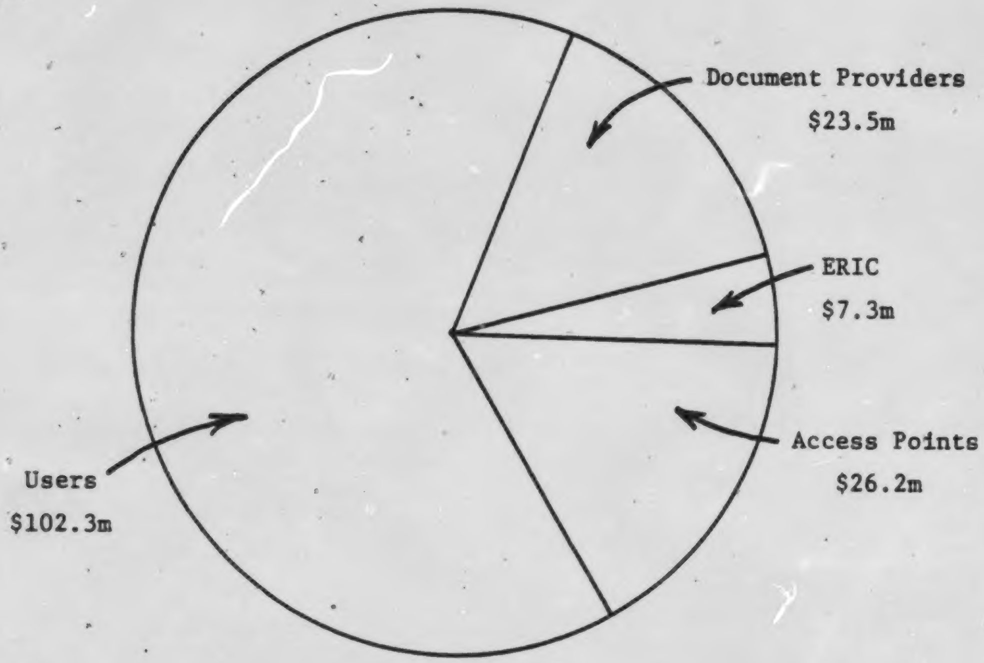
The general categories of ERIC System participants covered in this study were document providers (authors), ERIC and its component organizations, access points, and users. Costs associated with each are shown in Table 7.1 and Figure 7.2.

Table 7.1. ERIC System Costs by Participant (1979)
(Thousands of Dollars)

Participant	Cost	Percent
Document Providers	$ 23,500	15%
ERIC	7,284	5
Access Points	26,240	16
Users	102,345	64
TOTAL	$159,369	100%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

Figure 7.2. ERIC System Costs by Participant



SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

Document provider costs are those associated with the authorship of ERIC reports, of which there were nearly 17,000 in 1979. Costs shown reflect an average of 100 professional and 40 support hours per reports, and an estimated professional salary of $12.00 per hour based on the observed affiliations of ERIC report authors. Like use costs, authorship costs are generally absorbed by the institution with which a particular author or reader is affiliated.

ERIC costs total about $7.3 million, including those associated with the Clearinghouses, the Facility, EDRS, GPO, and Oryx Press. The total is greater than that expended by the NIE on ERIC in 1979 ($5.6 million) because it includes costs incurred by the participants for which they are reimbursed through other means, such as sales. One gross way of looking at ERIC expenditures is as the stimulation of a system for distributing and using educational information. In this sense, expenditures of $5.6 million stimulate an additional $130 million of activity.

Access point costs associated with ERIC total about $26 million, reflecting acquisition and distribution of ERIC information and related user support activities in an estimated 3,269 U.S. access points. Also included in this total is an estimated $2.0 million expended by data base processors in providing computer searches of the ERIC data base. In total, the access point costs make up 16 percent of ERIC system expenditures.

User costs dominate the ERIC system total, accounting for nearly two-thirds or over $102 million. These costs reflect the investment which educational personnel are willing to make in acquiring information from the ERIC products and services.

A total of about 6.3 million uses of the ERIC system has been estimated, including uses of the individual products and services as shown in Table 7.2. Time spent in reading or assimilating each product, on the average, is shown in the second column of the table. This was reported by users in the Requestor Population Survey. Total time for all ERIC product or service uses annually is over 10.5 million hours. Also included in total user time spent on

Table 7.2. ERIC System Use Costs (1979)

Product or Service	Number of Annual Uses	Assimilation Time	Hourly Salary Cost	Cost Per Use*	Total Use Cost (Thousands of Dollars)
RIE	838,000	4.5 hours	$8.42	$39.30	$32,908
CIJE	919,000	4.5 hours	8.31	38.80	35,644
Computer Search	198,000	3.5 hours	11.80	45.20	8,941
Documents - requests	785,000	2.5 hours	11.70	31.70	24,852
- retrievals	4,344,000	.5 hours	11.70	5.70	24,852

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

*Includes costs of user acquisition of documents, photocopying of documents, and identification of all products and services, as well as reading time.

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an ERIC product would be user acquisition of documents, photocopying of documents, and time spent identifying and accessing all products and services. These additional factors have been incorporated in estimates of user cost shown in the last two columns of Table 7.2.

The final factor in estimating user costs is the hourly salary cost. This was estimated from the Requestor Population Survey, in which annual salaries were indicated. Average salaries derived (assuming 1500 working hours per year) range from $8.31 per hour for RIE users to $11.80 for computer search users. One source of variation in average salaries was the proportion of users who had no income or incomes under $5,000; these groups accounted for 47 percent of RIE users, 30 percent of CIJE users, 17 percent of document users and only 14 percent of computer search users.

The usage times and costs shown for RIE and computer searches versus documents allow a comparison of time spent identifying material versus time spent using the same material. About 3.8 million hours plus some portion of the .7 million hours spent on computer searches involved the identification of ERIC reports. The level of use of ERIC documents identified was about 2.0 million hours. This underscores the amount of time required by the often underestimated function of material identification.

One consideration in the analysis of ERIC system costs is the distinction between Federal and non-Federal expenditures. As has been pointed out, $5.6 million of the ERIC costs given are expended by NIE. Other Federal expenditures come through support of document providers, access points, and users. From an analysis of RIE authors, about 20 percent appear to be Federally-funded, adding about $4.7 million to the Federal expenditure for a total of $10.3 million.

7.2 ERIC System Product and Service Costs

ERIC System Product and Service Costs are shown in Table 7.3 and Figure 7.3. As indicated, costs associated with RIE and CIJE are approximately equal and, in total, about five times as great as computer search costs. Costs associated with ERIC documents make up over 40 percent of all ERIC system costs.

The components of each product or service-related total may be considered at several levels of detail depending on the type of analysis being performed. A basic breakdown is to consider product and service costs associated with each participant, as is done in Table 7.4. Here we are reminded that the higher cost associated with documents is due primarily to authorship costs, and also to higher costs within the access points. ERIC costs are greatest for documents ($3.7 million). User costs are greatest for CIJE use ($35.6 million), and least ($8.9 million) for documents. Comparing access point and user costs, we see greater time spent by access points on user support and other aspects of storage and distribution for documents, while this product category is associated with the smallest use expenditures. There is a suggestion that as access costs decrease, user costs increase.

Another point of view is to compare all generation and distribution costs for the four products and service categories with use costs. This is done on a per-use basis in Table 7.5. Here we see use costs higher than generation and distribution costs for the three secondary products, substantially higher for RIE and CIJE. For documents, average generation and distribution costs of $9.50 exceed average use costs of $5.70. Overall unit costs for the four product/service categories are $15.20 for documents, $42.50 for CIJE, $46.50 for RIE, and $78.00 for computer searches.

Considering the unit costs for the three secondary products, computer search costs are, on the surface, quite high. This leads to two further areas of exploration -- the first involving further definition of a use, and the second involving a finer breakdown of the component costs.

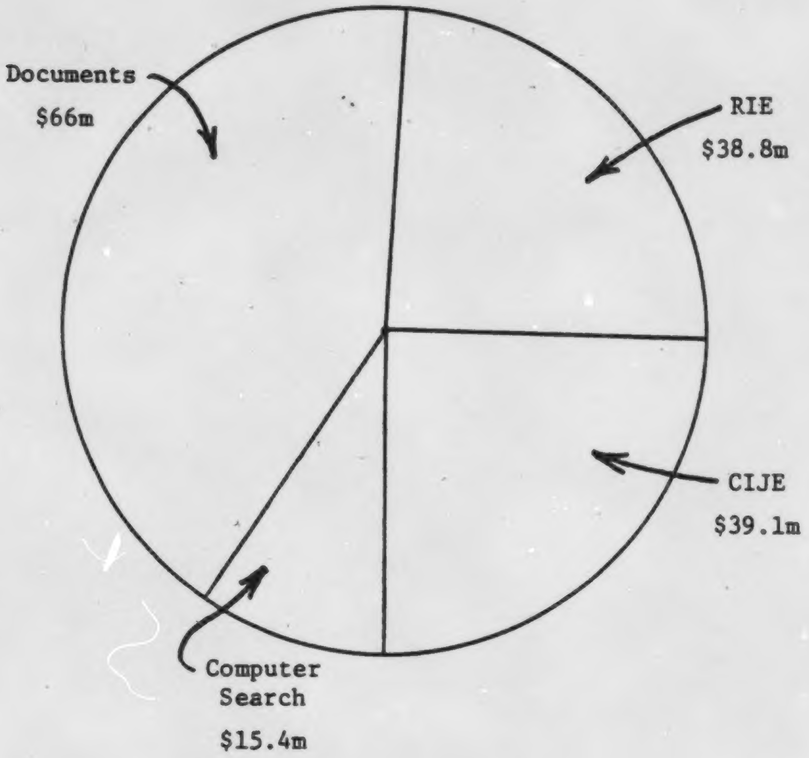
From the Requestor Population Survey, information was obtained on the number of citations identified and the number of citations identified and expected to be relevant for each type of use of a secondary product/service. Looking

Table 7.3. ERIC System Costs by Product or Service (1979)
(Thousands of Dollars)

Product or Service	Cost	Percent
RIE	$ 38,791	24%
CIJE	39,090	25
Computer Search	15,441	10
Documents	66,047	41
TOTAL	$159,369	100%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

Figure 7.3. ERIC System Costs by Product and Service



SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

Table 7.4. ERIC System Costs by Product or Service and Participant (1979)
(Thousands of Dollars)

	Participant				
Product or Service	Document Providers	ERIC	Access Points	Users	Total
RIE	--	2,132	3,751	32,908	38,791
CIJE	--	733	2,713	35,644	39,090
Computer search	--	762	5,738	8,941	15,441
Documents	23,500	3,657	14,038	24,852	66,047
TOTAL	23,500	7,284	26,240	102,345	159,369

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

Table 7.5. Unit Costs of ERIC System Products and Services (1979)

Product or Service	Number of Uses	Unit Costs Generation and Distribution	Use	Total
RIE	838,000	$ 7.00	$39.30	$46.30
CIJE	919,000	3.70	38.80	42.50
Computer Search	198,000	32.80	45.20	78.00
Documents	4,344,000	9.50	5.70	15.20

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

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at these, we find that the average number of relevant citations identified in a computer search was 22.8, while 7.2 relevant citations were identified in the average manual CIJE search and 8.6 in the average manual RIE search. Both the user times and the total costs given previously may now be related to the time and cost per relevant citation, as shown in Table 7.6.

The data of this table provide a sharp contrast and a quite different result from the previous analysis. RIE and CIJE are still comparable in terms of cost and time, but computer searching involves about one-third the user time and considerably lower costs per relevant citation. These findings begin to suggest the complexity of the comparison between manual and computer searches, and reflect in the aggregate data which can be used to model the comparison under differing conditions.

Further comparisons can be made by looking at the specific component costs included in the totals for RIE, CIJE and computer searching. A breakdown for each key function and participant is given in Table 7.7 and described below.

Generation costs involve the development of secondary information about educational materials by the Clearinghouses, the ERIC Facility, and Oryx Press. As indicated earlier, these costs were developed for the RIE and CIJE databases and then allocated in part to computer searching on the basis of relative use of the different forms. A computer search was assumed to include both RIE and CIJE files, so that the unit cost is approximately the sum of the two separate data base costs. There are some generation costs uniquely associated with computer searching, so that this unit cost is in fact slightly larger.

Reproduction and distribution costs include costs incurred by Oryx Press, GPO and the data base processors who provide ERIC tapes for searching. RIE and CIJE costs cover reproduction and distribution of both monthly, semiannual, and annual indexes (RIE only). Database processor costs are estimated for the approximately 22 batch services and six online services in the U.S. that provide access to the ERIC tapes. Reproduction and distribution costs, as might be expected, are significantly higher for online searching than for the manually searched indexes. CIJE reproduction and distribution costs are lower than those of RIE primarily because of a lower number of subscriptions; CIJE unit costs are lower because even with lower subscriptions the number of uses is about the same.

Table 7.6. RIE, CIJE and Computer Search Unit Times and Costs (1979)

Product/Service	Average Use Time[1] (Hours)	Average Cost Per Use[2] (Dollars)	Average Number of Relevant Citations	Use Time Per Relevant Citations (Minutes)	Cost Per Relevant Citations (Dollars)
RIE	4.5	$46.30	8.6	31	$5.40
CIJE	4.5	$42.50	7.2	38	$5.90
Computer Search	3.5	$78.00	22.8	9	$3.40

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

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[1] Includes time spent by users. Excludes time spent by access points and other system participants.

[2] Includes costs incurred by users as well as other system participants.

Table 7.7. Comparison of ERIC System RIE, CIJE, and Computer Search Costs (1979)

Cost Element (Function and Participant)	RIE		CIJE		Computer Search	
	Cost (Thousands of Dollars)	Cost Per Use (Dollars)	Cost (Thousands of Dollars)	Cost Per Use (Dollars)	Cost (Thousands of Dollars)	Cost Per Use (Dollars)
Generation:						
ERIC	$1,070	$1.28	$430	$.47	$362	$1.83
Reproduction and Distribution:						
ERIC	245		124		-	
Access Points	-		-		2,027	
	245	.29	124	.13	2,027	10.24
Acquisition and Processing:						
ERIC	277		1		69	
Access Points	59		29		-	
	336	.40	30	.03	69	.35
User Support:						
ERIC	540		178		331	
Access Points	3,692		2,685		3,712	
	4,232	5.05	2,863	3.12	4,042	20.41
Identification and Access:						
Users	1,173	1.40	1,268	1.38	777	3.92
Assimilation:						
Users	31,735	37.87	34,375	37.40	8,164	41.23
TOTAL	$38,791	$46.30	$39,090	$42.50	$15,441	$78.00
Relevant Citations per Use	8.6		7.2		22.8	
Cost per Relevant Citation	$5.40		$5.90		$3.40	

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

Acquisition and processing costs can be divided into two segments, the first concerned with the acquisition of reports and journal articles for processing and the second including acquisition of RIE and CIJE for use. These involve the Clearinghouses, the ERIC Facility and the access points. Acquisition and processing costs for generation dominate, making up about 80 percent of the total $435,000 for the three products/services. Acquisition and processing costs are higher for RIE reports than for CIJE journal articles; again, portions of both are allocated to the cost of computer searches.

User support costs include costs incurred at those service points having direct contact with end users, and were estimated from the Access Point Screener Survey. The ERIC Clearinghouses and Facility provide user support as well as the other academic and nonacademic access points described earlier. Generally, support time per use is highest for computer searching and slightly higher for RIE than for CIJE.

Identification and access costs are an estimate of the time required for the user to locate and get to the product/service involved. This was estimated by us to be 10 minutes for RIE and CIJE and 20 minutes for computer searching.[1] In much of the analysis of the cost of use, identification and access costs are combined with those for the next function, that of assimilation. For a primary information product, assimilation time might be thought of as reading time; for a secondary product, the definition given users conveys the dual tasks of searching the indexes and reviewing search output. As indicated earlier, these costs are greater for computer searching on a per use basis and less on a per relevant citation basis.

An analysis such as that above aids in exploring differences in the costs associated with RIE, CIJE and computer search usage. Additional detail, to the activity level, is available for further analyses. This includes the breakdown of individual ERIC participant costs -- those of the Clearinghouses, the Facility, EDRS, GPO and Oryx Press. Breakdowns such as these, especially on the functional level, may be used in addressing ERIC management issues.

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[1] This time was in addition to the time spent on "reading, examining, searching, or consulting" ERIC products or services which was reported in the Requestor Population Survey.

To complete the picture of ERIC costs at the more detailed level, Table 7.8 gives document-related costs by function and participant. Per use costs for each function are also shown. The total cost for ERIC documents is about $66 million, which includes costs associated with both ERIC reports and other publications generated by the Clearinghouses and access points.

Document generation costs are incurred by document providers, ERIC and access points. The cost of authorship, including professional and support time, is estimated at $1,400 per report. ERIC and access point costs are those associated with the development of other documents, including bibliographies, information analysis products, user guides, directories, and so on.

Reproduction and distribution costs for documents are dominated by EDRS costs but also include Clearinghouse, Facility and access point costs for other documents. Also included in reproduction and distribution costs are the cost of on-demand fiche to paper and fiche to fiche copying at the access points.

Included in acquisition and processing costs for documents are costs associated with the initial acquisition of documents by the Clearinghouses and the Facility and costs associated with acquisition and processing of documents for purposes of use by the Clearinghouses, access points, and individual users. More than 13 million fiche copies and over 40 thousand paper copies of documents were distributed in 1979.[1]

User support costs cover time spent by access point staffs in responding to requests for information. This includes those components of ERIC which provide direct services to users and other academic and nonacademic access points.

The final two functional categories are identification and access and assimilation. These are performed by users, and are dominated by an estimated average reading time of one-half hour per document retrieved.

Unit costs for each function are shown, totalling $15.20 per reading. Over 75 percent of the costs are for authorship and reading. Reproduction and distribution costs are quite low on a per use basis, primarily because document

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[1] An additional 4 million fiche copies are distributed annually to fill in back collections.

Table 7.8. ERIC System Document-Related Costs (1979)

Cost Element (Function and Participant)	Cost (Thousands of Dollars)	Cost Per Retrieval (Dollars)
Generation:		
Document Providers	$23,500	
ERIC	521	
Access Points	2,849	
	26,870	$6.19
Reproduction and Distribution:		
ERIC	2,358	
Access Points	440	
	2,798	.64
Acquisition and Processing:		
ERIC	342	
Access Points	5,502	
Users	351	
	6,195	1.43
User Support:		
ERIC	436	
Access Points	5,247	
	5,683	1.31
Identification and Access:		
Users	1,531	.35
Assimilation:		
Users	22,970	5.29
TOTAL	$66,047	$15.20

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

reproduction and distribution is dominated by relatively low cost microfiche copies. The role of libraries and other access points is reflected in user support costs.

As indicated previously, document costs cover both ERIC reports and other publications generated by the Clearinghouses and access points. Additional analysis by type of document would be desirable.

7.3 ERIC System Functional Costs

The third major breakdown of ERIC system costs utilized in this study was by function, with six broad functions identified:

Generation
Reproduction and Distribution
Acquisition and Processing
User Support
Identification and Access
Assimilation

The functional breakdown is provided to facilitate comparisons across ERIC products and services and between ERIC products and services and other comparable ones. Total ERIC system costs by function are shown in Table 7.9 and Figure 7.4.

The overall functional breakdown reflects again the large proportion of costs associated with use of ERIC products and services. The functional breakdown is perhaps most useful when combined with the product/service breakdown as shown in Table 7.10. Here we can compare the relative effort devoted to each function for each product or service and the relative level of effort among products and services under each function. Comparing RIE and CIJE costs, for example, we see the greater costs associated with RIE in all of the production and distribution functions. More costs are associated with RIE-related user support as well, but identification and assimilation costs are higher for CIJE.

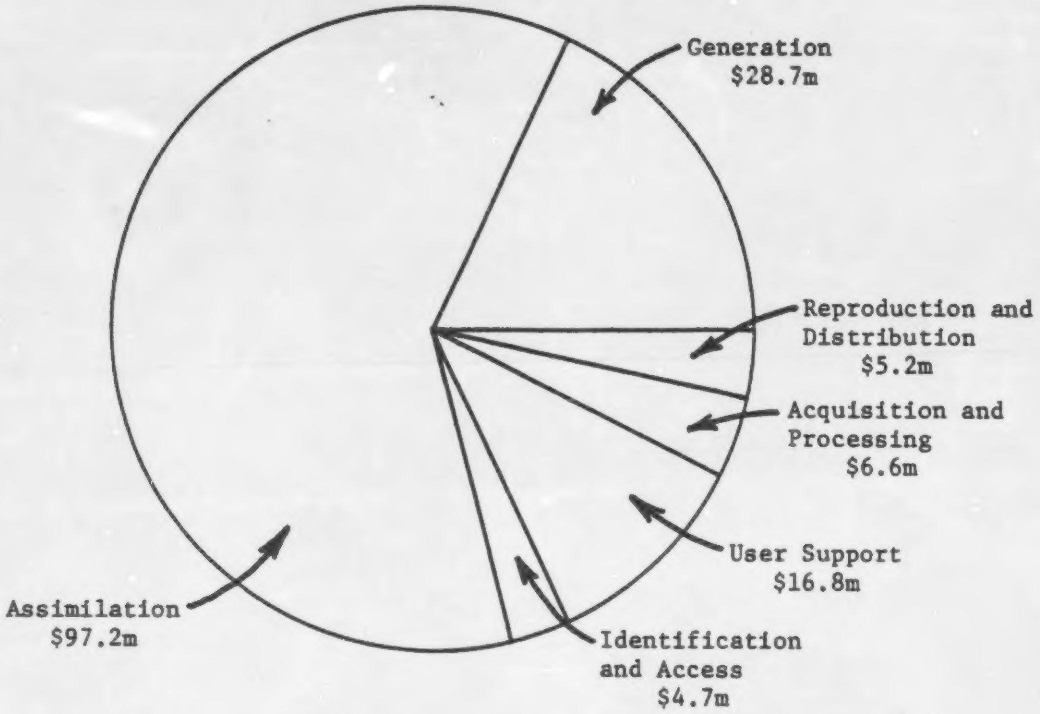
Table 7.9. ERIC System Costs by Function (1979)

(Thousands of Dollars)

Function	Cost	Percent
Generation	$28,732	18%
Reproduction and Distribution	5,194	3
Acquisition and Processing		
- for generation	681	
- for use	5,949	
- subtotal	6,630	4
User Support	16,820	11
Identification and Access	4,749	3
Assimilation	97,244	61
TOTAL	$159,369	100%

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

Figure 7.4. ERIC System Costs by Function



SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

Table 7.10. ERIC System Costs by Function and Product or Service (1979)
(Thousands of Dollars)

	Product or Service				
Function	RIE	CIJE	Computer Search	Document	Total
Generation	1,070	430	362	26,870	28,732
Reproduction and Distribution	245	124	2,027	2,798	5,194
Acquisition and Processing					
-for generation	275	-	65	340	680
-for use	61	30	4	5,855	5,950
-subtotal	336	30	69	6,195	6,630
User Support	4,232	2,863	4,042	5,683	16,820
Identification and Access	1,173	1,268	777	1,531	4,749
Assimilation	31,735	34,375	8,164	22,970	97,244
TOTAL	$38,791	$39,090	$15,441	$66,047	$159,369

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Cost Analysis, 1981.

A function to be explored in more depth in tracing communication channels for ERIC products and services is user support. Data on user support costs for access points come from the access point screener survey in which they were asked to give hourly rates of personnel and hours per month devoted to user support. Specifications were given for user support activities for each product or service following the general definition of user support as time spent by access point staff in responding to requests for information which resulted in the use of one or more ERIC products or services to satisfy the information requests.

User Support activities for RIE and CIJE at the access points were described as including:

- negotiating requests which result in the consulting of RIE or CIJE by requestors or access point staff,
- consulting, examining, or searching RIE or CIJE,
- showing people how to use RIE or CIJE,
- copying and/or distributing pages of RIE or CIJE in response to requests for information.

Excluded from RIE and CIJE User Support activities were formal orientation or training programs given by access point staff which covered ERIC.

Included under User Support for ERIC database searching were the following:

- negotiating requests which result in searches of the ERIC bibliographic database,
- constructing search statements,
- interacting with or operating the computer system,
- reviewing or screening the search output.

Excluded from User Support for ERIC database searching were:

- time devoted to searches which do not include the ERIC database,
- formal orientation or training programs which cover ERIC,
- obtaining, copying, or distributing documents retrieved through the ERIC search.

User Support for ERIC documents included the following:

- negotiating requests which result in consulting, retrieving, or copying ERIC documents,
- consulting, retrieving, or copying ERIC documents in response to requests for information or documents,
- showing people how to consult, retrieve, or copy ERIC documents,
- distributing copies of ERIC documents in response to individual orders or requests.

ERIC document User Support excluded:

- formal orientation or training programs given by staff which cover ERIC,
- consulting or using ERIC's Resources in Education (RIE) or ERIC's Current Index to Journals in Education (CIJE),
- time spent preparing or distributing locally-produced documents, newsletters, or bibliographies which normally do not receive ERIC "ED" identification numbers,
- time spent re-shelving or re-filing ERIC documents.

Information was obtained from the access points on categories of personnel providing user support, salaries, and hours spent. These dates can be viewed from a number of different perspectives to look at types of personnel involved in different activities and levels of activity in different categories of access points as well as overall cost figures.

Access point user support cost data are shown for the four ERIC products and services and the three types of access points in Table 7.11. This table does not include overhead of the access points and other user support costs incurred by other system participants. Both total costs and average costs per Clearinghouse are indicated. From the table, we see average costs ranging from $794 for RIE support in academic access points to $5,842 for computer search support in other access points. By type of access point, the average support costs are highest for RIE in ERIC Clearinghouses and the Facility, for documents in academic access points, and for searches in other access points. Overall, taking into account average costs and the number of access points, user support costs are greatest in academic access points.

Table 7.11. Average Annual User Support Labor Costs by ERIC Category and Type of Access Point

ERIC Category	Type of Access Point			
	ERIC Clearinghouses & Facility	Academic Access Points	Other Access Points	All Access Points
RIE				
Total Annual User Support	$96,202	$1,242,658	$1,042,003	$2,380,863
Number of Access Points	17	1,566	1,125	2,708
Average Annual User Support	$ 5,659	$ 794	$ 926	$ 879
CIJE				
Total Annual User Support	$32,277	$1,176,947	$ 437,375	$1,646,599
Number of Access Points	17	943	433	1,393
Average Annual User Support	$ 1,899	$ 1,248	$ 1,010	$ 1,182
ERIC Documents				
Total Annual User Support	$67,933	$2,691,295	$ 585,635	$3,344,863
Number of Access Points	17	783	620	1,420
Average Annual User Support	$ 3,996	$ 3,437	$ 945	$ 2,356
ERIC Computer Searches				
Total Annual User Support	$60,905	$1,175,504	$1,185,893	$2,422,302
Number of Access Points	16	512	203	731
Average Annual User Support	$ 3,807	$ 2,296	$ 5,842	$ 3,314

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

The user support costs associated with RIE in particular were used as the basis for a computerized cost model developed as a demonstration. This is described in Appendix F. Within the limits imposed by the samples used to collect data for this study, similar models could be constructed for other system components and aggregated to reflect overall system costs. This would provide greater flexibility in the analysis of costs at the detailed level and in the modelling of costs under alternate assumptions.

SECTION 8

RECOMMENDATIONS FOR FURTHER RESEARCH AND ANALYSIS

The data presented in this report have been of a primarily descriptive nature. There are a substantial number of additional analyses which might be conducted using these data. In addition, these data have suggested further research projects which might be conducted in the future. Some of the most significant of these are described below.

The Relationship Between Print and Computerized Information Services

RIE and CIJE provide printed access to ERIC bibliographic data at more than twice as many ERIC access points as provide online ERIC searching. Yet many of the ERIC access points which provide online access to ERIC also subscribe to RIE and CIJE. This suggests the hypothesis that online searching is not a perfect one-for-one replacement for printed bibliographic access. Yet, overall, online searching of databases in general is increasing faster than subscriptions to printed abstracting and indexing publications. And some publishers are afraid that the expansion of online searching threatens their printed subscription base.

The Access Point Screener Survey database contains data on both online searching and RIE/CIJE usage volume, as well as user support cost data. Further analyses of these data would allow the direct comparison of relative costs of online vs. manual searching. Such an analysis would be useful both for ERIC as well as providers of online and printed bibliographic products in general.

The Relationship Between Search Output and User Satisfaction

Part of the sample for the Requestor Population Survey consisted of requestors who had received online ERIC searches. As part of their responses, Requestors estimated the number of documents they identified as well as the proportion of those retrieved which were relevant to the topic or title of their request. These data provide an opportunity to investigate the relationship between the composition of online search output as well as user satisfaction. Such an analysis would be significant because it would provide an opportunity to investigate the development of online searching performance measures.

Linking of Data for the Access Point Screener Survey, Access Point Primary Survey, and Requestor Population Survey

These three surveys' data currently reside in three separate computerized files. All the identification numbers for individual records, however, incorporate the same set of access point identification numbers, so it is possible, for example, to link requestors from a particular access point with the entire Access Point Screener questionnaire. This provides the means to address the following types of questions:

- What is the relationship between the number and types of information products provided by an access point to the number and type of products used by its users?
- Is it possible to subdivide requestor types by the geographic region in which the access points are located?
- Is there a relationship between access points' funding sources and the type of requestors served?

Alternative methods for combining the files might be addressed, such as generating a single multi-dimensional database versus a single file (for example, using standard database management system software) composed only of a subset of responses from separate files.

Computerization of Cost Models

The cost analyses presented earlier in this report are based on manual calculations involving means and totals generated from the study's various data sources. We made an initial attempt to computerize the calculation of access point costs related to Resources in Education (RIE). A computerization of this cost analysis offered substantial flexibility in simulating costs for various usage levels and access point characteristics.

We abandoned these attempts when it became clear that the effort required to develop this computerized cost model would be too extensive given the fact that the database had been developed using SPSS with survey analysis, rather than cost simulation, in mind. Appendix F describes the initial documentation of this cost model.

Nevertheless, it is feasible, with appropriate programming resources, to develop and refine such models so that different levels and types of ERIC access point costs could be simulated. Such models would be useful planning and evaluation tools, and with appropriate refinement, might be useful as management tools.

Use of ERIC for Physical Access by Administrators, Academics, and Consultants

According to the Education Population Survey results, educational Administrators, Academics, and Consultants are more likely to use ERIC organizations for physical access to ERIC than are educational Practitioners. Why is this? Is it because it is to these populations to which ERIC has traditionally directed its publicity or marketing efforts? Or is it because ERIC is perceived as having stronger professional links with Administrators, Academics, and Consultants than with Practitioners?

Comparison of the Time Spent Using Bibliographic Information with Time Spent Using Documents Identified from the Bibliographic Information

The provision of bibliographic information to users has associated with it a probability of increasing total information search time (because a search may reveal many documents whose existence had not been expected) as well as a probability of decreasing total information search time (because irrelevant document citations can be scanned and rejected before an effort is made to obtain their full text). Time spent using search output is included in the Requestor Population Survey as well as the number of documents identified and the number of documents determined to be relevant. One possible analysis would be to relate the time spent reading or examining the search with the number of documents identified or obtained, possibly subdividing by the purpose for which the information is sought and by relative satisfaction.

Development of "Value" Indicators for Information Systems

In economic theory, the willingness of people to pay for goods is sometimes used as a surrogate measure for estimating the value of those goods in the economy. Usually this approach cannot be used in estimating the value of information services provided by public institutions since users seldom pay out of their own pockets for the information services thus obtained; this is supported by the results of the Requestor Population Survey. However, it is possible to use time spent reading as a surrogate for a lower bound estimate of value, as has been done in our analysis of data from the Requestor Population Survey. Numerous additional analysis opportunities exist for looking at these data, including:

- The relationship between time spent using an information product or service and the users' satisfaction with that product.

- The dependence of time spent upon the purpose for which information is sought, holding various other variables constant, such as requestor income and type of product or service used.

Assess the feasibility of merging remote access to ERIC documents with emerging electronic library networks

Computer systems such as OCLC were originally developed to provide remote input, modification, and access to shared library cataloging records. Such systems are now used by network members to transmit interlibrary loan requests for books and journals. To what extent might such systems already be used for transmitting interlibrary requests for ERIC documents? And to what extent is it feasible to increase the use of such systems in the future for remote ordering of ERIC documents in microfiche and papercopy?

Additional analysis of Requestor Population Survey

The analysis of the Requestor Population Survey presented here has been primarily descriptive in nature. A significant number of additional analyses are possible, such as:

1. The analysis presented here has been done in terms of requests, not requestors. Through analysis of data on multiple uses of ERIC and the reported times the sampled ERIC product or service had been used in the past, it should be possible to make an estimate of the number of and type of requestors who use ERIC during the year.

2. The profile of ERIC requestors given here is based primarily on classification by the two main variables used in the study: type of ERIC product or service, and type of access point. It will also be possible to investigate the relationship, say, between type of employer and type of information sought in order to generate a more detailed picture of ERIC requests. For example, are people outside the academic community more likely to seek information of a more practical or applied nature than those inside the academic community? And if so, how is this "interaction effect" related to overall satisfaction with their use of ERIC?

3. Satisfaction and individual evaluative attributes are measured in the Requestor questionnaire on an ordinal 1-5 scale, and the data provided here from these scales is displayed in terms of percents. More sophisticated analysis of these variables, either by themselves or linked with variables such as intended use, would help describe ERIC's user population and might provide ERIC with information useful to product design and product planning.

The Value of Bibliographic Publications and Services

Data obtained in this study allow the tracing of the chain from use of a bibliographic product/service to use of primary information. These data could be analyzed to explore the value of secondary products and services. Other means of identifying educational information should also be studied. Of particular interest is the time required to identify educational information via various channels, compared with characteristics of the results such as exhaustivity, timeliness, pertinance and so on.

Management Analysis

This study involved derivation of unit cost data for a large number of operations performed by components of ERIC--that is, the Clearinghouses, the Facility, EDRS, GPO and Oryx Press. These data provide a basis for comparing ERIC with other similar operations, and for assessing cost effectiveness. Some information was also obtained which would allow comparison among Clearinghouses for in-depth analysis of different activities. While this study has concentrated on developing estimates of overall "system" costs, these more discrete cost data (maintained by King Research in manual files) would help answer many more specific internal management questions which NIE and ERIC may generate. For example, we have not related costs occurring at individual access points to the amount of usage occurring at those individual access points; generating such data and displaying it in terms of a distribution of unit costs (instead of in terms of average costs, as presented in this report), would help ERIC to place its provision of services in the context of the entire spectrum of ERIC service providers.

ERIC Referral and Other Services

Because of the attention placed in this report to RIE, CIJE, ERIC documents, and ERIC searches, we have not analyzed some elements which are associated with more highly specialized information providers. Such data include:

- ERIC Referral Services.
- ERIC-based publications
- income generated from sale of services

These data are available in the Access Point Screener Survey database for further analysis.

How does ERIC compare with other information systems?

Both in terms of cost and usage, this study has concentrated on ERIC. Yet ERIC does not operate in isolation, even in the field of education. Many other non-ERIC information products and services exist. To what extent does ERIC differ from other information products and services in terms of attributes such as image, quality, ease of access, practicality, etc.? On one level, this is a typical "market research" problem, since knowing how ERIC is perceived will help in making decisions such as how to distribute it, how to train people to use it, etc.

On a deeper level, however, there is the question of the extent to which users need to understand the degree to which ERIC is an interacting "family" of related products and services. Some of the promotional brochures describing ERIC have presented a schematic diagram which outlines the flow of documents and abstracting and indexing data through the system. Has this helped potential users understand the intricacies of the system? And if so, has this understanding led to an increased satisfaction with ERIC's output?

Possibly the best way to answer these types of questions is to conduct research among educators and other potential users to measure not just the frequency with which ERIC and non-ERIC information sources are used but also the reasons for using these different information sources, and how they compare in terms of a variety of quantitative and non-quantitative attributes. Such a research study should focus not on information usage per se but upon problem-solving or decision-making situations which involve information as one of the resources used during problem-solving or decision-making.

Product Design Analysis

Two questions in the Requestor Population Survey are particularly appropriate for aiding in the development of new ERIC products or services. One is the question concerning what other non-ERIC information products or services were used. The other is the question of which other ERIC products or services were used. It may be possible to develop a "profile" of ERIC requests, somewhat along the lines of the "overlap" analysis of the Access Point Screener Survey data in which we estimated how many access points had RIE only, how many had RIE and CIJE, how many had RIE and documents, and so on. We would then take these requests, subdivided by the combinations of various products and services used, and examine the differences among the individual requestors generating the different types of requests. These differences might be in terms, for example, of the purpose for which information is sought, or, the differences might be explained in terms of demographic characteristics, such as employer type or job function.

The underlying goal of this analysis would be to identify patterns describing or explaining the different combinations of ERIC products or services used. Of particular interest would be the identification of characteristics of requestors of various combinations of primary and secondary information products, since succeeding generations of information technology may provide for the efficient storage and retrieval of full-text documents. Analyzing the Requestor Population Survey results would help to identify the markets to which future information products or services might be addressed.

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Investigate the sequential nature of ERIC usage

We have shown that ERIC products and services are often used in combination with each other, e.g., RIE and CIJE, RIE with documents, etc. One question which arises concerns the sequence in which ERIC and non-ERIC information sources are used. Traditional thinking and user training suggests a secondary product-primary product sequence. But since ERIC covers both "open" literature as well as its own report literature, the sequence may actually be more complex than originally presumed.

Further analysis of the distribution patterns of ERIC documents

This study has shown that the bulk of "on-demand" access to ERIC microfiche and papercopy documents occurs via ERIC access points. This appears to justify the very early ERIC decision to decentralize ERIC documents access through the mechanism of Standing Order Customers and local documents collections. We have not, however, performed a substantial analysis of the degree to which (a) ERIC access points order their documents from non-EDRS sources, and (b) the degree to which ERIC access points serve "non-local" users. It may be possible, with further work, to classify access points in terms of their provision of service to local and non-local users; such an analysis would help to gain more insight into the structure of the ERIC access point "system," especially as it relates to the question of the interaction between local service providers (such as, for example, school districts) and intermediate service providers (e.g., state dissemination agencies).

APPENDIX A

COST DATA COLLECTION

Cost data collected for this project came from the various surveys conducted and from other directed data collection efforts. Data were collected within a general framework reflecting participants, products and services, and functions involved. Generally, data collection was done at a fairly detailed level with analysis and presentation of results at a more aggregated level. The level of aggregation was chosen to be responsive both to the overall goals of the study and needs of system participants to protect sensitive cost data.

In order to identify cost data to be collected by this study, all of the activities performed by system participants were considered. Each activity was then classified by function and by product or service involved. As an activity was considered, related evaluation measures were also identified. Figure A.1 contains a list of activities performed in the ERIC system, with participant, function, product/service category, and potential measures indicated. Detailed definitions of the labor and non-labor cost factors associated with each activity were also developed.

Figure A.1 is arranged by participant, since this is the easiest way to be exhaustive in a functional analysis of the system. For the most part, cost data were also collected on a participant basis. The various classifications of each activity in the Figure were then used to organize the data by function, participant, and product and service.

Figure A.1 reflects the six functions used in costing:

Generation
Reproduction and Distribution
Acquisition and Processing
User Support
Identification and Access
Assimilation

Transmission, discussed earlier in the conceptual framework for this study as the basis for the ERIC system, is a part of each function and also serves as the interface between functional activities. Together, the six system functions plus Transmission describe all the activities carried out by the various participants creating, processing, and using ERIC products and services.

Figure A.1

Participant	Activity	Function	Product/Service	Cost Measures
Document Providers	Preparation of document	Generation	Documents	Cost/report Cost/page
	Submission of document	Generation	Documents	Cost/report
Clearinghouses	Acquisitions	Acquisition and Processing	All	Cost/report
	Selection	Acquisition and Processing	All	Cost/report
	RIE input	Generation	RIE; searches	Cost/resume
	CIJE input	Generation	CIJE; searches	Cost/resume
	User services products	Generation, Reproduction and Distribution	Documents	Cost/product
	Question answering	User Support	All	Cost/question
	User workshops	User Support	All	Cost/workshop Cost/attendee
	Information analysis papers	Generation, Reproduction and Distribution	Documents	Cost/IAP
	Extensive bibliographies	Generation, Reproduction and Distribution	Documents	Cost/bibliography Cost/reference Cost/copy
	Clearinghouse management	Overhead	-	Cost/clearinghouse
	Systems maintenance and improvements	Overhead	-	Cost/clearinghouse
	Staff training	Overhead	-	Cost/staff person Cost/clearinghouse
	Advisory Board	Overhead	-	Cost/board member Cost/clearinghouse
	Publicity and public relations	User Support	All	Cost/clearinghouse
	Special projects	Varies	Varies	Various
Facility	Acquisition	Reproduction and Distribution	Documents	Cost/document
	Resumes	Reproduction and Distribution	RIE; CIJE; searches	Cost/resume

Participant	Activity	Function	Product/Service	Cost Measures
	Data to file	Reproduction and Distribution	RIE; CIJE; searches	Cost/resume
	Tapes	Reproduction and Distribution	RIE; CIJE; searches	Cost/tape Cost/record
	Publications	Reproduction and Distribution	Documents	Cost/document
	Printing and duplication	Reproduction and Distribution	Documents	Cost/document Cost/copy
	Accessions to EDRS	Reproduction and Distribution	Documents	Cost/document
	Computer system maintenance	Reproduction and Distribution	RIE; CIJE; searches	None
	Reference request processing	User Support	All	Cost/request
	Descriptor/source code file maintenance	Generation	RIE;CIJE; searches	Cost/item to file
	Data base user services	User Support	Searches	None
	Special projects	Varies	Varies	Various
	Other support activities	Overhead	-	None
EDRS	Preparation of master	Reproduction and Distribution	Documents	Cost/document Cost/fiche
	Reproduction and distribution of standing order fiche	Reproduction and Distribution	Documents	Cost/report copy Cost/page copy
	Reproduction and distribution of on-demand fiche	Reproduction and Distribution	Documents	Cost/report copy Cost/page copy
	Reproduction and distribution of on-demand hard copy	Reproduction and Distribution	Documents	Cost/report copy Cost/page copy
	Order processing	Reproduction and Distribution	Documents	Cost/order Cost/item ordered
	Administration	Overhead	-	None
GPO	Reproduction and distribution of RIE	Reproduction and Distribution	RIE	Cost/subscription Cost/page copy
	Order processing	Reproduction and Distribution	RIE	Cost/order
	Administration	Overhead	-	None

Participant	Activity	Function	Product/Service	Cost Measures
Oryx Press	Reproduction and distribution of CIJE	Reproduction and Distribution	CIJE	Cost/subscription Cost/page copy
	Abstracting and indexing	Generation	CIJE; searches	Cost/resume
	Order processing	Reproduction and Distribution	CIJE	Cost/order
	Administration	Overhead	-	None
Standing Order Customers	Ordering	Acquisition and Processing	Documents	Cost/order
	Check-in and processing	Acquisition and Processing	Documents	Cost/SOC
	Maintenance (refiling)	Acquisition and Processing	Documents	Cost/SOC Cost/use
	User support	User Support	Documents	Cost/user Cost/use
	Reproduction	Reproduction and Distribution	Documents	Cost/copy
	Storage	Acquisition and Processing	Documents	Cost/SOC
	Promotion	User Support	Documents	Cost/SOC
	Administration	Overhead	-	Cost/SOC
RIE Subscribers	Ordering	Acquisition and Processing	RIE	Cost/subscriber
	Check-in and processing	Acquisition and Processing	RIE	Cost/subscriber
	Maintenance	Acquisition and Processing	RIE	Cost/subscriber Cost/use
	User support	User Support	RIE	Cost/user Cost/use
	Reproduction	Reproduction and Distribution	RIE	Cost/copy
	Storage	Acquisition and Processing	RIE	Cost/subscriber
	Promotion	User Support	RIE	Cost/subscriber
	Administration	Overhead	-	Cost/subscriber

Participant	Activity	Function	Product/Service	Cost Measures
CIJE Subscribers	Ordering	Acquisition and Processing	CIJE	Cost/subscriber
	Check-in and processing	Acquisition and Processing	CIJE	Cost/subscriber
	Maintenance	Acquisition and Processing	CIJE	Cost/subscriber Cost/use
	User support	User Support	CIJE	Cost/user Cost/use
	Reproduction	Reproduction and Distribution	CIJE	Cost/copy
	Storage	Acquisition and Processing	CIJE	Cost/subscriber
	Promotion	User Support	CIJE	Cost/subscriber
	Administration	Overhead	-	Cost/subscriber
Search Services	User support	User Support	Searches	Cost/search
	Searcher training	User Support	Searches	Cost/search
	Promotion	User Support	Searches	Cost/search service
	Administration	Overhead	-	Cost/search service
EDRS Demand Customers	Ordering	Acquisition and Processing	Documents	Cost/order Cost/document ordered
	Receipt, check-in and processing	Acquisition and Processing	Documents	Cost/document
	Maintenance	Acquisition and Processing	Documents	Cost/document Cost/use
	User support	User Support	Documents	Cost/user Cost/use
	Reproduction	Reproduction and Distribution	Documents	Cost/copy
	Storage	Acquisition and Processing	Documents	Cost/document
	Promotion	User Support	Documents	Cost/institution
	Administration	Overhead	-	Cost/institution

Participant	Activity	Function	Product/Service	Cost Measures
Data Base Processors	Tape acquisition	Acquisition and Processing	Searches	Cost/tape
	Tape processing	Reproduction and Distribution	Searches	Cost/tape
	System development	Reproduction and Distribution	Searches	Cost/processor
	System maintenance	Reproduction and Distribution	Searches	Cost/processor
	Data base search	Reproduction and Distribution	Searches	Cost/search
	User support	User Support	Searches	Cost/user Cost/search
	Promotion	User Support	Searches	Cost/processor
	Administration	Overhead	-	Cost/processor
	Processing of document orders	Reproduction and Distribution	Documents	Cost/order
User	Acquisition and storage of:			
	documents	Acquisition and Storage	Documents	Cost/document
	RIE	Acquisition and Storage	RIE	Cost/subscriber
	CIJE	Acquisition and Storage	CIJE	Cost/subscriber
	Identification of and access to:			
	documents	Identification and Access	Documents	Cost/use
	RIE	Identification and Access	RIE	Cost/use
	CIJE	Identification and Access	CIJE	Cost/use
	searches	Identification and Access	Searches	Cost/use

Participant	Activity	Function	Product/Service	Cost Measures
	Assimilation of:			
	documents	Assimilation	Documents	Cost/use
	RIE	Assimilation	RIE	Cost/use Cost/accessed document
	CIJE	Assimilation	CIJE	Cost/use Cost/accessed document
	searches	Assimilation	Searches	Cost/use Cost/accessed document

Products and services considered are RIE, CIJE, computer searches, and documents. The latter includes ERIC reports and also bibliographies, information analysis products and other publications produced by ERIC and ERIC access points. Reference service is not included directly as a product/service category but is considered as a user support activity associated with each of the categories of documents, RIE, CIJE and searches.

Participants indicated include document providers, all the groups involved in processing ERIC products and services, a number of intermediaries, and users. Intermediaries included are standing order customers, EDRS demand customers, RIE subscribers, CIJE subscribers, data base processors, and search services. For the cost analysis these were treated as conceptually different entities; in reality, of course, there is significant overlap. The treatment of costs in a particular institution associated with more than one ERIC product or service requires a means of allocating these costs. The allocation approach taken for specific participants is discussed under each participant below.

Activities covered in Figure A.1 are at differing levels of detail, depending on the perceived importance of that activity in cost analysis and on a knowledge of the available data. The major focus was on deriving general results for analysis. Within the framework established, more detailed activities could be defined and modelled for various special purpose analyses.

Activities identified were generally clearly associated with one or more functions and one or more products/services. Perhaps the hardest distinctions to make are in the area of searching, where activities of the data base processor can either be considered as Acquisition and Processing of an existing product, an ERIC tape, or as Reproduction and Distribution of a new product, a searchable system. The latter philosophy was adopted in this case.

In the area of user support, activities such as question answering, reference, and promotion were assumed to be associated with the four product/service categories. In practice the distinction was not so clear, and was difficult to quantify. Some allocation of these costs were made on the basis of level of use.

A.1 Cost Data Collection Methods

A mix of methods was used to acquire the necessary cost data. In the simplest case, data already existed in a suitable form; for example, some Clearinghouse-related costs were taken directly from performance category budget sheets. Data on these sheets also illustrate an added step required for some data collection. This step is development of an allocation method, or a way in which to differentiate, say, IAP costs between the Generation and the Reproduction and Distribution functions. Allocation methods were sometimes developed from a sample of cases or expressed in terms of relationship to some known data item, such as volume of activity. In other cases, such as allocation of overhead costs across various activities, the costs were spread in proportion to other costs.

In some cases, data items were not identifiable for the whole universe but came from a sample survey. Some activity costs and many cost components contributing to activity costs came from the surveys described elsewhere in this report and other surveys performed. The Access Point Surveys and Requestor Population Survey in particular provided invaluable data on levels of various activities. On-site surveys of Clearinghouses, access points, and data base processors were also performed.

Costs in several areas came from models, either refinements of models used in the past or newly developed models. An example of this is the modelling of EDRS costs, with costs defined in terms of the volume of activity and the processes used. Steps followed in modelling include:

a. observation of the processes used,
b. collection of volume data,
c. development of a hypothetical model,
d. validation of the model.

In this case, validation took the form of comparing model results with estimated sales. Models were required to develop costs in a number of areas.

Data required and methods used in developing data for each participant are summarized in the following section.

A.2 Cost Data Collection by Participant

Document Providers

Activity data required:	Preparation of documents Submission of documents
Other data required:	Source of funds
Data sources:	RIE analysis, Educational salary data

The contribution of document providers to the ERIC System is in the authorship of reports. Activities performed involve only the Generation function and only ERIC-distributed reports, a subdivision of the product/service category of documents. The major cost elements involved in the activities of preparation and submission of documents are associated with the labor of professional and support personnel in writing, typing, proofing, and so on. Nonlabor costs, such as for paper, postage, and equipment, can be considered as part of institutional overhead, and will be included in the costs as such.

Time spent by document providers was estimated at 100 hours plus 40 support hours per report, based on data about information analysis product authors and scientific and technical report authors . To determine author demographics and funding sources, a sample of RIE records was taken and authors listed were coded by affiliation, sex, and funding source (Federal or non-Federal). Results are shown in Table A.1.

Salary data for educators and researchers were taken from The Condition of Education and Statistical Abstracts using the affiliation categories shown in Table A.1. Annual salaries were converted to hourly, assuming a 1500 hour year for educators and a 2080 hour year for researchers. Salaries were combined according to the proportions identified for report authors, with the resulting average of $12 per hour. Support salaries were taken as $5 per hour, for a total per document cost of $1400.

Table A.1. Distribution of Authors of RIE Documents

Affiliation	Number	Percent	Percent Female	Percent Federally Funded
University	43	18	67	35
College	6	3	--	17
Community College	3	1	33	33
State level	24	10	46	--
School district	8	3	50	--
Clearinghouse or Federal agency	14	6	40	100
Other	41	17	27	29
Not indicated	96	41	39	5
Total	235	100%	36%	20%

SOURCE: RIE Author Analysis, King Research, Inc.

Clearinghouses

Activity data required: Acquisitions
Selection
RIE input
CIJE input
User services/products
Question answering
User workshops
Information analysis papers
Extensive bibliographies
Clearinghouse management
Systems maintenance and improvement
Staff training
Advisory board
Publicity and public relations
Special projects

Other data required: Sources of funds
Basis for allocations

Data sources: Performance Category Budget Sheets
Clearinghouse visits
Access Point Survey

Clearinghouse activities involve all of the ERIC products/services and the Generation, Reproduction and Distribution, Acquisition and Processing, and User Support functions. They thus perform as formal components of the ERIC system itself as well as access points. The main sources of data on Clearinghouse costs were Performance Category Budget sheets, NIE consolidated Clearinghouse data, Access Point Screener responses, and on-site visits with four Clearinghouses. The four Clearinghouses visited included the Clearinghouse on Reading and Communication Skills, the Clearinghouse on Elementary and Secondary Education, the Clearinghouse on Information Resources, and the Clearinghouse on Urban Information.

Performance Category Budget sheets give actual and proposed costs by the activity categories indicated. When one of these activities involved a single function and a single product/service, the associated cost was used directly. Otherwise, an allocation method was determined. Several Clearinghouse activities (user service products, information analysis papers, and extensive bibliographies) involve both the Generation and the Reproduction and Distribution functions. A breakdown of these activity costs by function was obtained from the Clearinghouse. The second allocation problem concerns RIE and CIJE input, and the way in which these costs are allocated between RIE and CIJE and searches of the ERIC data base. This was the basis of relative use of the two means of access to the secondary information, with each computer search assumed to involve both RIE and CIJE records.

A number of Clearinghouse activities (management, systems maintenance and improvements, staff training, and advisory board) relate somewhat generally to all functions performed and all products/services involved. These were considered as overhead items, to be allocated to particular functions and products/services in proportion to other cost assignments. Promotional activities of the Clearinghouses were similarly treated. As appropriate, special product activities were treated as an overhead, excluded from analysis, and/or assigned to specific function and product/service groups.

Three of four Clearinghouses visited supplied sufficient data on labor, direct costs, and overhead (indirect costs) to determine a percentage distribution of total line item costs (i.e. RIE input, CIJE input, etc.) in labor, direct, and indirect categories. These percentages were applied to the Clearinghouse total. Administrative costs are the summation of PCB line items for Clearinghouse management, advisory board, systems maintenance, public relations and staff training.

The second step was to allocate the PCB line items to the designated functions; Generation, Acquisition and Processing for generation, Acquisition and Processing for use, User Support and Administrative. The relationship between PCB line items and ERIC functions is shown in Figure A.2.

The data base building activities acquisition and selection include costs incurred in the receipt (both solicited and unsolicited), review, and selection of documents. Distribution of these costs is across RIE, documents, and searching, with one-half to acquisition and processing for generation of documents, and the remaining half distributed between RIE and searching according to use.

Figure A.2. Relationship between Clearinghouse PCB Items and ERIC Functions

PCB Line Item	ERIC Functions
Acquisitions - RIE	Acquisition and Processing (RIE and Search)
Selections - RIE	Acquisition and Processing (RIE and Search)
RIE Input	Generation (RIE and Search)
CIJE Input	Generation (CIJE and Search)
User Service Products	Other
Information Analysis Products and Extensive Bibliographies	Generation (documents) Reporduction and Distribution (documents)
Question Answering	User Support (all products/services)
Workshops	Other
Clearinghouse Management	Overhead
System Maintenance	Overhead
Staff Training	Overhead
Advisory Boards	Overhead
Publicity/Public Relations	Overhead

Acquisition and Processing for use covers costs incurred by access points for ordering, claiming, receiving, checking in and shelving RIE and CIJE and ERIC documents. The Clearinghouses' responses to the Screener provided the number of subscriptions held to each index and whether or not the Clearinghouses were Standing Order Customers. The costs of acquisition and processing of searching capability is the labor related to and direct computer costs of buying and processing RIE and CIJE tapes for batch processing. Two Clearinghouses indicated that their own staff run batch searches on the computer indicating the acquisition and processing costs are incurred by the Clearinghouse.

User support data were collected for Clearinghouses via the Access Point Screener Survey. The costs indicated for User Support related to RIE, CIJE, Documents, and Searching do not however cover the entire realm of Support costs. The PCB line items break down User Service Products, Workshops, and Question Answering. These costs are distributed among the products by the proportion of user support costs attributed to each.

Results of the Clearinghouse data collection and analysis activities are shown in Table A.2.

The ERIC Facility

Activity data required: Acquisition
Resumes
Data to file
Tapes
Publications
Printing and duplication
Accessions to EDRS
Computer system maintenance
Reference request processing
Descriptor/source codes file maintenance
Special projects
Other support activities

Other data required: Allocation data

Data source: Facility

Table A.2. Clearinghouse Cost Breakdown, 1979
(Thousands of Dollars)

	RIE	CIJE	Search	Documents	Total
Generation	$ 631	$ 311	$ 216	$ 514	$1,672
Reproduction and Distribution	---	---	---	506	506
Acquisition for Generation	226	---	53	280	559
Acquisition for Use	2	1	4	2	9
User Support	520	174	330	367	1,391
Total	$1,379	$ 486	$ 603	$1,669	$4,137

Facility activities primarily involve the Reproduction and Distribution function, although Generation and User Support are also performed. Aspects of all four product/service categories are addressed by Facility activities as well. A general problem in determining Facility costs according to our scheme has been addressed earlier, i.e. the difficulty of allocating data base production costs between RIE and CIJE and computer searches.

A functional breakdown of costs is prepared by the Facility in a monthly unit cost report and was the source of data incorporated in the overall costs. The categories used in this report provided the basis for our identification of Clearinghouse activities, and for the most part were appropriate for aggregation by function and product/service category.

EDRS

Activity data required:	Preparation of masters Reproduction and distribution of standing order fiche Reproduction and distribution of on-demand fiche Reproduction and distribution of on-demand hardcopy Order processing Administration
Other data required:	Income
Data sources:	EDRS interview Cost model

EDRS activities involve the Reproduction and Distribution function and the document product/service category. Data on costs were not directly available from EDRS. The functions performed, however, were modelled and cost estimates developed based on a knowledge of the volume of reports processed. Volume data was obtained from EDRS. One aspect of model verification was a comparison of results with estimated EDRS sales.

Volume data obtained for EDRS included number of masters prepared; titles, pages and fiche reproduced; standing order copies; on demand fiche and paper copier; and number of orders. These were combined with unit costs for the activities indicated above to develop overall costs.

GPO

Activity data required:	Reproduction and distribution of RIE Order processing Administration
Other data required:	Income
Data sources:	GPO interview Cost model

GPO activities involve the Reproduction and Distribution function and RIE. Sources of data on GPO costs were discussions with GPO and models of the publication process used previously by KRI. Printing and binding costs for GPO were expressed as a function of number of issues per year, number of pages, and size of print run. Also modelled were the costs of mailing, subscription maintenance, and overhead. Sources of funds for GPO activities involving ERIC are ERIC itself, subscribers, and a general Federal contribution. The first two will be ascertained and the third estimated based on our estimate of total costs.

Oryx Press

Activity data required:	Reproduction and distribution of CIJE Abstracting and indexing Order processing Promotion Administration
Other data required:	Income
Data sources:	Oryx Press interview Cost model

Oryx Press activities involve the Reproduction and Distribution function and CIJE. They also do some abstracting and indexing (Generation function, CIJE and ERIC searches). Costs for Oryx were estimated using the same procedures as for GPO, that is, discussions with Oryx about the volume of activity and the type of processing performed combined with use of previously developed models.

Access Points

Activity data required:	Ordering Check-in and processing Maintenance User support Searcher training Reproduction Storage Administration Promotion
Other data required:	Income
Data sources:	Access Point Survey Access Point interviews

The intermediaries covered include RIE and CIJE subscribers, SOC's and EDRS demand customers, and search services. Categorization in this way is equivalent to a grouping by product and has been used in sampling for the Access Point Survey. Cost data on intermediaries was obtained from the Access Point Survey and from a smaller, in-depth survey of selected access points. The Access Point Screener Survey collected staff costs associated with user support; other cost data were collected by contacts with the selected access points.

Access Points visited included the Kentucky State Department of Education, the University of Kentucky Teachers College Library, George Washington University, Cornell University, Columbia University Teachers College, and the Board of Cooperative Education Services. Each visit consisted of a review of Access Point Screener information and more detailed discussions of activities and costs according to the functions performed and products and services used.

Functions performed by the access points include Reproduction and Distribution, Acquisition and Processing, and User Support. In the list of activities, reproduction falls under the Reproduction and Distribution function; ordering, check-in and processing, maintenance, and storage under the Acquisition and Processing function; and user support, searcher training and promotion under the User Support function. Administrative costs are an overhead item.

Ordering, check-in and processing, maintenance and storage costs are dependent primarily on the volume and types of ERIC materials held. Unit costs were estimated from a small sample of access points and related to data on holdings overall.

User support costs were estimated by the intermediaries in the Access Point Screener Survey. Allocations of total user support by the access point to documents, RIE, CIJE and searches were then made on the basis of use. Promotional and training activities were indicated in the survey responses, with the in-depth access point study used to estimate associated costs. Overhead items at the access points associated with ERIC were also estimated based on the in-depth study.

Data Base Processors

Activity data required: Tape acquisition
Tape processing
System development
System maintenance
Data base search
User support
Administration
Processing of document orders
Promotion

Other data required: Income

Data sources: Access Point visits
Access Point Survey
Cost model

Data base processors are organizations which purchase ERIC tapes, process them, and search them for either internal or external users. Activities they perform involve the functions of Reproduction and Distribution, Acquisition and Processing, and User Support, and primarily the product/service category of ERIC searches. Some data base processors also transmit orders for documents to an appropriate source; this activity involves the document product/service category.

The Access Point Survey was used to identify the volume of searching performed by the processors of ERIC tapes. Results indicated nearly 200,000 searches via 22 batch and six online processors.

Costs associated with the given volume of processing were estimated using models of internal and commercial operations, with some data coming from interviews with the Madison Academic Computing Center, the Mechanized Information Center of Ohio State University, and the Computer Based Information Center and the Knowledge Availability Information Service at the University of Pittsburgh. Costs estimated could not be apportioned between the functions involved and thus were included in total in Reproduction and Distribution. The average per search costs, exclusive of user support activities at the access points, were taken as $5.90 for batch searches and $11.50 for online searches.

Users

Activity data required:	Acquisition Identification and access Assimilation
Other data required:	Salaries
Data sources:	Requestor Survey

The major source of data on ERIC usage came from the Requestor Survey, which provided information on time spent with ERIC products/services and on salaries. Average salaries were derived for users of each of the four

ERIC products or services, and the median time associated with use was determined. These data were then combined with data on the number of uses of each product or service.

Identification and access time was calculated at 10 minutes, on the average, for RIE, CIJE, and document use and 20 minutes for computer searches. These times were then combined with salary and volume of usage information to determine Identification and access costs. Acquisition costs include the costs of unassisted fiche to paper copying by users and of ordering time associated with direct orders to EDRS.

APPENDIX B

ACCESS POINT SCREENER SURVEY

B.1 Sample Development

Table B.1 displays the identity of lists used to generate the sample of organizations for the Access Point Screener Survey. For RIE and CIJE subscribers, we made an initial estimate of the number of separate organizational units which received these publications. For example, if two separate libraries on a university campus each received RIE, they were counted separately since we assumed that they were managed separately. Please note that the numbers of subscribers is less than the number of subscriptions since some subscribers receive more than one subscription.

The most "uncertain" number on the list, "EDRS Customers", was based on an estimate derived from hand-counting order forms supplied to King Research by EDRS. We excluded orders from individuals in this count, and included only counts of libraries and other organizational entities, our goal being to capture a pool of potential ERIC access points which might not have been covered in the other lists.

In addiiton, we cross-compared samples among all of these lists and the following additional lists:

Information Resources for Education, First Edition. Columbus, Ohio: ERIC Clearinghouse on Career Education (ERIC ED 149 192).

Dissemination Networks: Information Resources for Education. San Francisco: Far West Laboratory for Educational Research and Development, 1978.

Private Organizations and Associations: Information Resources for Education. Arlington, Virginia: Consortium of Associations for Educational Dissemination, Aug. 1978.

Databases and Clearinghouses: Information Resources for Education. Columbus, Ohio: The National Center for Vocational Education.

We examined these lists in detail to see if their inclusion as additional sampling frames would help identify additional ERIC access points not picked up by the lists described in Table B.1. As it turned out, their overlap with the Table B.1 lists was so great that we decided against including them as additional sample frames.

Table B.1 Lists Used to Generate the Sample of ERIC Access Points in the U.S. (Numbers Exclude ERIC Clearinghouses & Facility)

List	Number of U.S. Organizations on List
RIE Subscribers[1]	3,017
CIJE Subscribers[2]	1,391
ERIC Search Services[3]	298
ERIC Microfiche Collections[4]	624
Deposit Account Customers[5]	261
EDRS Customers[6]	4,400

Source: King Research, ERIC Cost and Usage Study, Access Point Screener Survey, 1981

[1] List published by ERIC in December, 1979.

[2] Printout generated December 1979 by ORYX Press, publisher of CIJE, includes subscribers to CIJE semi-annual edition.

[3] List published by ERIC in November, 1978.

[4] List published by ERIC in September, 1978.

[5] Supplied by EDRS, current as of January, 1979.

[6] Estimate based on hand tabulation of all EDRS demand order forms received during 1978. This number is an estimate of the number of different U.S. organizations which submitted orders for ERIC documents to EDRS in 1978.

B.2 Sample Size and Survey Response

Table B.2 displays the actual numbers for the survey, showing how many organizations were sampled from each list. The ERIC Clearinghouses and the ERIC Facility were all included "with certainty", i.e. they were not sampled. The remaining sample was distributed fairly evenly among RIE subscribers, CIJE subscribers, known ERIC search services, and "ERIC document" organizations. This latter group, by far the most complex, was subdivided into known ERIC fiche collections, organizations known to have deposit collections with EDRS, and known EDRS customers. The latter two categories were included as small components of the mail-out since we did not know what to expect concerning their current status as ERIC access points.

The column headings on Table B.2 have the following meanings:

- "Mail-out sample size"---Number mailed out initially in November 1980.
- "No. of questionnaires re-mailed"---Some organizations, when we conducted our telephone and mail follow-ups, reported not receiving a questionnaire. This column is the number of questionnaires re-mailed. We concentrated telephone follow-ups on the RIE and CIJE categories since the addresses from these lists were the briefest, usually not containing departmental designations for large organizations such as academic institutions.
- "No. of analyzed responses"---This is the number of questionnaires returned in time and complete enough to be keypunched.
- "No. received after cut-off"---These are questionnaires returned too late to be included in the computer data base.
- "Refusals"---These are the organizations which refused to respond.
- "Not qualified"---The usual reason for this statement was that ERIC was not used or received. Additional reason: subscriber was an individual, not an organization.
- "Undeliverable"---Returned by Postal Service as undeliverable.
- "No longer exists"---Example: organizations whose funding had been discontinued or which had been merged into another department.
- "Other, no response"---All other non-respondents.

When gross response rates are calculated using the number mailed out and the actual number keypunched, they range from a high of 100% for the Clearinghouses the Facility to a low of 29% for EDRS deposit accounts. This is an overall response rate of 50%.

Table B.2 Comparison Between Sample Size and Survey Response

List	Mail-out Sample Size	No. of Questionnaires Re-mailed	No. of Analyzed Responses	No. Received After Cut-off	Refusals	"Not Qualified"[1]	Undeliverable (moved, etc.)	No Longer Exists	Other, No Response
ERIC Clearinghouses & Facility	17	---	17	---	---	---	---	---	---
RIE Subscribers	250	100	139	3	16	18	2	2	70
CIJE Subscribers	250	88	127	7	27	5	1	1	82
ERIC Search Services	248	10	136	1	2	4	7	1	97
ERIC Fiche Collections	187	6	88	10	2	---	3	1	83
Deposit Accounts	45	1	13	---	---	1	---	1	30
EDRS Customers	66	---	21	---	1	3	1	---	40
TOTAL	1,063	205	541	21	48	31	14	6	402

Source: King Research, Inc. ERIC Cost and Usage Study, 1981.

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[1] Usual reason for respondent to classify self as "not qualified": Does not use or subscribe to ERIC.

B.3 Description of the Population Surveyed

In order to estimate the number of ERIC "Access Points" in the U.S., we needed to (1) validate our initial estimates of list sizes, and (2) measure the amount of actual overlap among the different lists used for sampling so that an actual count of unique organizations could be made.

Table B.3 displays what respondents from each list stated about their status in terms of the composition of the original list. This table should be read as follows:

"Of the 139 respondents sampled from the RIE subscriber list, 95.7 percent report currently subscribing to RIE; 43.2 percent of the 139 respondents sampled from the RIE subscriber list report subscribing to CIJE", and so on. An interesting finding displayed on this table is that only 42.9 percent of the 21 respondents sampled from the 1978 EDRS Customer file report having ordered a document from EDRS during the past twelve months. This suggests that there may be a substantial number of "non-repeat" customers ordering from EDRS.

Table B.4 displays our original estimate of the individual list sizes along with the revised numbers, these revised numbers being the result of a series of calculations used to estimate the number of unique organizations in the populations surveyed. Based on the information supplied to us by respondents, we see, for example, that the actual number of unique organizations subscribing to RIE was approximately 89 percent of our original estimate. This difference may be due to a variety of factors, including possible cancellations since the publication of the RIE subscriber list in December 1979; reporting by some multiple organizational units as one organizational unit, as when several university departments report together; and possible shifts or increases in the RIE subscriber population since the compilation of the lists used in sample development.

On the other hand, the number of organizations which report having conducted or made arrangements for online or batch ERIC searches is approximately 140 percent greater than our original estimate of 298. This is not surprising, and is obviously due partially to the admittedly restricted coverage of the

Table B.3 Coverage of ERIC Products and Services by Different Lists

Sample Source List	Number of Survey Respondents[1]	Percent of Survey Respondents which: Subscribe to RIE	Subscribe to CIJE	Perform ERIC Searches	Maintain Fiche Collections	Have EDRS Deposit Accounts	Have Ordered Documents from EDRS
RIE Subscribers	139	95.7	43.2	21.6	42.4	7.2	25.9
CIJE Subscribers	127	86.6	98.4	41.7	55.9	9.4	22.8
ERIC Search Services	136	83.8	74.3	95.6	66.9	13.2	34.6
ERIC Microfiche Collections	88	97.7	87.5	53.4	97.7	19.3	27.3
Deposit Account Customers	13	76.9	76.9	76.9	53.8	100.0	53.8
EDRS Customers	21	76.2	33.3	38.1	38.1	4.8	42.9
Total	524	89.5	72.5	53.1	61.5	13.5	29.0

Source: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981.

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[1] Excludes ERIC Clearinghouses and ERIC Facility.

Table B.4 Estimate of Total Population of U.S. Organizations Surveyed, With and Without Overlap Removed (Counts Exclude ERIC Clearinghouses & ERIC Facility)

Category	Number	
	Original[1]	Revised[2]
RIE Subscribers	3,017	2,691
CIJE Subscribers	1,394	1,376
ERIC Search Services	298	715
ERIC Microfiche Collections	624	1,110
Deposit Account Customers	261	199
EDRS Customers	4,400	1,751
Total Without Overlap Removed	9,994	7,842
Total With Overlap Removed	6,555	3,948[3]

SOURCE: King Research, Inc. ERIC Cost and Usage Study, 1981, Access Point Screener Survey, 1981.

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[1] Estimate made before Access Points Screener Survey was conducted.

[2] Estimate based on responses received to Access Points Screener Survey.

[3] This number is greater than the actual number of ERIC access points, 3,269 (see text of report for analysis of access points).

original 1978 list used for sampling, the possible increase in online searching, and the broader definition used in the Screener survey.

Also, it is interesting to note the larger number of microfiche collections in the revised estimate over the original estimate, due most likely to a more general definition of an ERIC microfiche collection used in the Screener survey.

Finally, we note that of the 4,400 organizations which ordered documents from EDRS in 1978, our final estimate of the actual number of unique organizations in this population which actually reported having ordered from EDRS during the past twelve months was 1,751.

Based on these calculations and upon the actual responses of the survey organizations, we estimate that the population of unique U.S. organizations covered by our survey was actually 3,948, which is substantially smaller than the 6,555 originally estimated from our cross-checking of sampled organizations among the various lists. This "shrinkage" is due primarily to a substantially greater amount of "overlap" being reported by survey respondents than originally anticipated. Further shrinkage occurs when only organizations which provide access to ERIC products and services are considered; when this is done, we estimate that there were 3,269 ERIC "access points" in the U.S. in 1980.

B.4 Access Point Screener Questionnaire

The following is the basic questionnaire used in the Access Point Screener Survey. The one illustrated is the one sent to known CIJE subscribers The following section illustrates the separate versions of Section 8 (hours devoted to user support) also used in the survey.

NIE No. 215A-I

Form Approved
FEDAC No. S-192
Approval Expires: April 1981

ERIC COST AND USAGE STUDY
ACCESS POINT SCREENER SURVEY

THIS IS A SURVEY OF ORGANIZATIONS WHICH PROVIDE ACCESS TO THE PRODUCTS AND SERVICES PRODUCED AND SUPPLIED BY THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC). TO QUALIFY FOR PARTICIPATION IN THIS SURVEY, **YOUR ORGANIZATION** SHOULD CURRENTLY DO ONE OR MORE OF THE FOLLOWING:

1. Subscribe to Resources in Education (RIE), which is published for ERIC by the Government Printing Office (GPO).
2. Subscribe to Current Index to Journals in Education (CIJE), published for ERIC by Oryx Press.
3. Conduct — or make arrangements for conducting — computerized searches of the ERIC bibliographic database (either batch or on-line).
4. Maintain a collection of ERIC documents in either microfiche or papercopy format.
5. Provide assistance to individuals or organizations in using or obtaining any ERIC products or services.

BY **"YOUR ORGANIZATION"** WE MEAN THE ORGANIZATIONAL UNIT OR DEPARTMENT AT THE FOLLOWING ADDRESS WHICH IS RESPONSIBLE FOR MAINTAINING AND/OR PROVIDING ACCESS TO ONE OR MORE OF THE ABOVE ERIC PRODUCTS OR SERVICES:

IF THE ORGANIZATIONAL UNIT OR DEPARTMENT NAMED ON THE LABEL IS NOT THE LOCATION AT THIS ADDRESS WHICH MAINTAINS OR PROVIDES ACCESS TO ERIC PRODUCTS OR SERVICES, PLEASE FORWARD THIS QUESTIONNAIRE AND ITS ACCOMPANYING MATERIALS TO THE APPROPRIATE LOCATION.

IF THIS ADDRESS IS INCORRECT OR INCOMPLETE, PLEASE SUPPLY THE CORRECT NAME AND ADDRESS BELOW:

____
____
____

Agency Affiliation:
NATIONAL INSTITUTE OF EDUCATION
KING RESEARCH, INC.

This report is authorized by legislation (20 USC 1221e). While you are not required to respond, your cooperation is needed to make the results of the survey accurate and timely.

NOTE:
It is King Research's policy not to reveal the names and addresses of study participants to anyone other than its own staff members who are directly involved in the study.

DEFINITIONS

THE FOLLOWING ARE DEFINITIONS OF SOME OF THE MOST IMPORTANT TERMS USED THROUGHOUT THIS QUESTIONNAIRE:

YOUR ORGANIZATION	The organizational unit or department which is responsible for maintaining and/or providing access to ERIC products or services (e.g., a college or university library, a school district's central media resources center, a state education agency's information resource center, etc.). This questionnaire should be completed from the perspective of this organizational unit or department.
PARENT ORGANIZATION	The larger organization in which your organization is administratively situated (e.g., a university or university department, a research center, a state agency, an intermediate service agency, a school district, etc.).
OTHER ORGANIZATIONS	Organizations other than your own organization or parent organization (e.g., other colleges, universities, school districts, companies, or state agencies, etc.).

I.D. NUMBER ____________

SECTION 1

DESCRIPTION OF YOUR ORGANIZATION

NOTE: THE PURPOSE OF THIS SECTION IS TO PROVIDE US WITH A BRIEF DESCRIPTION OF THE ORGANIZATIONAL CONTEXT WITHIN WHICH ERIC PRODUCTS OR SERVICES ARE PROVIDED.

1.1 Please supply the name, title, and telephone number of the individual in your organization who can answer any questions we might have concerning your responses to this questionnaire:

Name: ____

Title: ____

Telephone number (with area code): ______________________

1.2 Which of the following best describes your organization? (Please circle appropriate code number.)

College or university library or resource center (central campus facility)	01
College or university library or resource center (departmental facility)	02
State education agency	03
School library or media center (local school or building level)	04
School library or media center (headquarters or district level)	05
School district R&D center	06
ERIC Clearinghouse	07
Other Federally-supported clearinghouse	08
NIE-supported educational lab or center	09
Intermediate service provider (provides educational services to multi-county or multi-district level, e.g., BOCES, CESA, ACES, ECSU, etc.)	10
Public library	11
Society or association	12
Business or corporation	13
Other (please describe): ____	14

1.3 Is one of your organization's primary functions to provide information services? (e.g., documents, statistics, literature searches, answers to questions, etc.)? (Please circle 1 or 2.)

Yes	1
No	2

1.4 Which of the following categories best describes the largest single groups of users of your organization's services?

Employees of or student affiliated with your organization or its parent organization 1

Employees of or students affiliated with other organizations 2

Other (describe): ____________________

____________________ 3

1.5 Are the services provided by your organization intended primarily to support or promote activities associated with teaching, education or training?

Yes 1

No 2

1.6 Which of the following categories best describes your organization's primary source of financial support:

College or university budget 1

State funds (other than college or university budget) 2

Federal grant(s) or contract(s) 3

Private funding (e.g., foundation, donations, etc.) 4

Direct billing or charges for services rendered (other than Federal grants or contracts) 5

Local, county, or district school budget 6

City, county, or municipal budget (other than school budget) 7

Other (describe): ____________________

____________________ 8

1.7 What was your organization's total overall annual budget for the most recent year for which your annual budget data is available? (Include budget for non- ERIC as well as ERIC -related activities)

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PREFACE TO SECTIONS 2-8

ESTIMATING USAGE OF ERIC PRODUCTS AND SERVICES

THE FOLLOWING SECTIONS ASK FOR YOUR ESTIMATES OF THE VOLUME OF USAGE AND OTHER TRANSACTIONS INVOLVING ERIC PRODUCTS AND SERVICES. IT IS LIKELY THAT SOME OF YOUR RESPONSES WILL BE BASED ON ESTIMATES MADE BY YOU OR YOUR STAFF. THIS IS ACCEPTABLE. WE REALIZE THAT ERIC-RELATED STATISTICS ARE OFTEN NOT KEPT, OR IF KEPT, MAY NOT BE RECORDED IN THE SAME FORMAT AS WE ARE REQUESTING HERE. WE SUGGEST USING THE FOLLOWING GUIDELINES WHEN YOU MAKE ESTIMATES:

- BE CONSERVATIVE. WE WOULD RATHER UNDERESTIMATE THAN OVERESTIMATE ERIC USAGE. OUR CHIEF CONCERN IS THAT YOU BE CONFIDENT THAT THE NUMBERS YOU SUPPLY ARE AS REALISTIC AS POSSIBLE.
- DON'T MAKE "WILD" GUESSES. IF YOU HAVE NO BASIS FOR MAKING AN ESTIMATE, PUT A "DK" FOR "DON'T KNOW" IN THE SPACE PROVIDED.
- IF YOUR ESTIMATE IS "NONE," FOR WHATEVER REASON, PUT A ZERO (0) IN THE SPACE PROVIDED.
- USE WHOLE NUMBERS ONLY. DO NOT USE DECIMALS, FRACTIONS, OR RANGES. (FOR EXAMPLE, 10.5 SHOULD APPEAR AS "11," 2¼ SHOULD APPEAR AS "2," AND 10-20 SHOULD APPEAR AS THE MIDPOINT, "15.")
- UNLESS REQUESTED OTHERWISE, PLEASE SUPPLY DATA ON AN AVERAGE, PER MONTH BASIS. TAKE INTO ACCOUNT THE MONTH-TO-MONTH OR SEASONAL VARIATION WHICH MAY OCCUR THROUGHOUT THE YEAR. IF YOU FIND IT SIMPLER TO MAKE ESTIMATES ON A WEEKLY, RATHER THAN MONTHLY BASIS, PLEASE DO SO, MULTIPLYING BY FOUR (4) TO OBTAIN A MONTHLY TOTAL.

(continued on next page)

SECTION 2

RESOURCES IN EDUCATION (RIE)

NOTE: THIS SECTION OF THE QUESTIONNAIRE DEALS WITH ERIC 'S RESOURCES IN EDUCATION **(RIE)**, PUBLISHED BY THE U.S. GOVERNMENT PRINTING OFFICE. IF YOUR ORGANIZATION DOES NOT CURRENTLY SUBSCRIBE TO THE MONTHLY OR SEMI-ANNUAL EDITION OF **RIE**, PLEASE CHECK HERE ☐ AND SKIP TO SECTION 3 OF THIS QUESTIONNAIRE. OTHERWISE, PLEASE CONTINUE WITH QUESTION #2.1.

2.1 How many subscriptions to RIE does your organization currently receive? (Include paid, U.S. Depository Library, and free subscriptions, if any):

a) Subscriptions to monthly RIE ....

b) Subscriptions to semi-annual RIE ....

2.2 During which months do the highest amounts and lowest amounts of RIE use occur at your organization? (Use the month codes displayed in the box at the left.)

Jan	01	Jul	07
Feb	02	Aug	08
Mar	03	Sep	09
Apr	04	Oct	10
May	05	Nov	11
Jun	06	Dec	12

a) Month with highest RIE use ....

b) Month with lowest RIE use ....

2.3 On the average, how many times per month does your organization's staff consult RIE? (Please base your estimate on the number of individual information requests which result in RIE use by your organization's staff. Include your organization's staff use as well as staff assistance to requestors, whether or not requestors are physically present. Insert number in box, zero if none. Insert "DK" for Don't Know.) ....

2.4 To the best of your knowledge, is the amount of unassisted use made of RIE by individuals other than your staff greater than, less than, or about the same as the number reported in #2.3? (Circle 1, 2, 3, 4, or 5.)

Greater than	1
Less than	2
About the same	3
Don't know	4
Not applicable	5

SECTION 3

CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)

NOTE: THIS SECTION OF THE QUESTIONNAIRE DEALS WITH ERIC 'S CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE), PUBLISHED FOR ERIC BY ORYX PRESS. IF YOUR ORGANIZATION DOES NOT CURRENTLY SUBSCRIBE TO THE MONTHLY OR SEMI-ANNUAL EDITION OF CIJE, PLEASE CHECK THIS BOX ☐ AND SKIP TO SECTION 4. OTHERWISE, PLEASE CONTINUE WITH QUESTION #3.1.

3.1 How many subscriptions to Current Index to Journals in Education (CIJE) does your organization currently receive? (Insert number in space, zero (0) if none. Include both paid and free subscriptions.)

a) Subscriptions to monthly CIJE ....

b) Subscriptions to semi-annual CIJE ....

3.2 During which months do the highest amounts and lowest amounts of CIJE use occur at your organization? (Use the month codes displayed in the box at the left.)

Jan	01	Jul	07
Feb	02	Aug	08
Mar	03	Sep	09
Apr	04	Oct	10
May	05	Nov	11
Jun	06	Dec	12

a) Month with highest CIJE use ....

b) Month with lowest CIJE use ....

3.3 On the average, how many times per month does your organization's staff consult ERIC 's Current Index to Journals in Education (CIJE)? (Please base your estimate on the number of individual information requests which result in CIJE use by your organization's staff. Include your organization's staff use as well as staff assistance to requestors, whether or not requestors are physically present. Insert number in box, zero if none. Insert "DK" for Don't Know.) ....

3.4 To the best of your knowledge, is the amount of unassisted use made of CIJE by individuals other than your staff greater than, less than, or about the same as the number reported above in #3.3? (Circle 1, 2, 3, 4, or 5.)

Greater than	1
Less than	2
About the same	3
Don't know	4
Not applicable	5

SECTION 4

ERIC DOCUMENTS

THIS SECTION OF THE QUESTIONNAIRE DEALS WITH YOUR ORGANIZATION'S COLLECTION OF ERIC DOCUMENTS IN EITHER MICROFICHE OR PAPERCOPY. WE DEFINE A "COLLECTION" OF ERIC DOCUMENTS AS A GROUP OF ERIC MICROFICHE OR PAPER DOCUMENTS WHICH ARE SHELVED OR FILED TOGETHER IN ONE LOCATION. EXAMPLES OF ERIC DOCUMENTS ARE THE THESAURUS OF ERIC DESCRIPTORS; ERIC REPORTS WHICH MAY BE IDENTIFIED THROUGH THE "ED" NUMBER ANNOUNCED IN RIE; OR ERIC'S "INFORMATION ANALYSIS PRODUCTS" (IAP's). IF YOUR ORGANIZATION DOES NOT HAVE A COLLECTION OF ERIC DOCUMENTS, CHECK THIS BOX ☐ AND SKIP TO SECTION 5. OTHERWISE, PLEASE CONTINUE WITH QUESTION #4.1.

4.1 Does your organization currently maintain a collection of ERIC microfiche? (circle 1 or 2.)

Yes 1
No .... 2 (Skip to #4.13)

4.2 Is your organization currently a Standing Order Customer (SOC) for ERIC microfiche by which it receives regular shipments of ERIC reports on microfiche? (Circle 1 or 2.)

Yes 1
No 2

4.3 Is your ERIC microfiche collection a "closed collection," i.e., does a user require the assistance of a staff member to both retrieve and re-file ERIC microfiche? (Circle 1 or 2.)

Yes 1
No 2

4.3 Approximately how many ERIC microfiche are in your organization's collection? (Insert the number in the appropriate box, depending on whether your estimate is based on (a) the number of individual pieces of microfiche or (b) the number of individual report titles.)

a) Number of individual pieces of microfiche .... ☐
b) Number of individual report titles .... ☐

4.5 During which months do the highest amounts and lowest amounts of ERIC microfiche use occur at your organization? (Use the month codes displayed in the box at the left.)

Jan	01	Jul	07
Feb	02	Aug	08
Mar	03	Sep	09
Apr	04	Oct	10
May	05	Nov	11
Jun	06	Dec	12

a) Month with highest ERIC microfiche use .... ☐
b) Month with lowest ERIC microfiche use .... ☐

4.6 On the average, approximately how many times per month is your ERIC microfiche collection used? (Estimate the number of times ERIC documents on microfiche are retrieved from the collection, either by your organization's staff or by individual requestors. Include use of ERIC microfiche in your organization's facility as well as retrieval of ERIC microfiche for copying or distribution to other organizations.) (As above, report usage for either the number of individual pieces of microfiche or the number of individual report titles. Insert "DK" for Don't Know.)

a) Number of times individual pieces of microfiche used ....

b) Number of times individual report titles used .... ←

4.7 Please indicate below how many pieces of each of the following types of equipment (in good working order) are located in your organization's facilities or are available for use by your organization's staff or users:

a) Microform readers (equipment which can be used for reading microfiche only or for both microfilm and microfiche) ....

b) Microform reader-printer (can be used for reading microfiche as well as for making paper copies from microfiche) .... >1 60

c) Other microfiche-to-paper duplicating equipment (e.g., high-speed printer) ....

4.8 On the average, how many duplicate pages on paper per month are made from your organization's ERIC microfiche? (Insert number in space, zero (0) if none.)

a) Made by individual users (unassisted by your organization's staff) ....

b) Made by your organization's staff ....

4.9 Approximately what percent of 4.8b above, if any, is produced in response to requests forwarded to you by other information providers (e.g., librarians, media specialists, linking agents, etc.) employed by organizations other than your parent organization? (Insert percent in box, zero (0) if none. Use "NA" if 4.8b is zero.) .... %

4.10 Does your organization have access to equipment which can be used to duplicate ERIC microfiche onto microfiche?

Yes 1

No .... 2 **(Skip to #4.12)**

4.11 On the average, how many duplicate ERIC microfiche are produced per month using this equipment? (Insert number in box, zero (0) if none.) ....

4.12 Approximately what percent of the above microfiche, if any, is produced in response to requests forwarded to you by other information providers (e.g., librarians, media specialists, linking agents, etc.) employed by organizations other than your parent organization? (Insert percent in box, zero (0) if none) .... %

4.13 Does your organization have a deposit account with the ERIC Document Reproduction Service (EDRS), which is operated by the Computer Microfilm International Corporation (CMIC) in Arlington, Virginia?

Yes 1

No 2

Don't Know 3

4.14 Approximately how many copies of the Thesaurus of ERIC Descriptors (any edition or version) does your organization own? (Insert number in box, zero (0) if none.) ....

4.15 Does your organization currently maintain a collection of ERIC documents in papercopy? (A "collection" is defined as a group of documents which are shelved or filed together in one location. Please exclude from your response newsletters, promotional brochures, announcement lists, specialized bibliographies, or other documents provided and distributed only by individual libraries, Clearinghouses, or non-ERIC organizations. Also exclude any other documents which are not assigned ERIC "ED" identification numbers.)

Yes 1
No .... 2 **(Skip to Section 5)**

4.16 Approximately how many paper copies of ERIC documents are in your organization's collection? (Include documents obtained from EDRS as well as any ERIC document obtained from any other source, such as clearinghouses, state agencies, or libraries. Count multiple copies of the same document title separately.) ....

4.17 Approximately how many times per month is an ERIC papercopy document retrieved, copied, or borrowed from your collection? ....

4.18 Approximately what percent of #4.17, if any, is accounted for by requests forwarded to you by other information providers (e.g., librarians, media specialists, linking agents, etc.) employed by organizations other than your parent organization? .... %

SECTION 5

ERIC DOCUMENT ORDERING AND RECEIVING

NOTE: THIS SECTION DEALS WITH THE ACTIVITY OF YOUR ORGANIZATION IN ORDERING OR RECEIVING ERIC DOCUMENTS OTHER THAN RIE OR CIJE DURING THE PAST TWELVE MONTHS. CONSIDER ERIC DOCUMENTS TO BE ANY MICROFICHE OR PAPERCOPY DOCUMENTS ORDERED OR RECEIVED FROM THE ERIC DOCUMENT REPRODUCTION SERVICE (EDRS) OR FROM ANY OTHER SOURCE OF ERIC DOCUMENTS. PLEASE EXCLUDE MICROFICHE RECEIVED AS PART OF A STANDING ORDER COLLECTION (SOC) SUBSCRIPTION, AS WELL AS JOURNAL ARTICLES IDENTIFIED THROUGH USE OF CIJE OR COMPUTERIZED SEARCHING OF THE ERIC BIBLIOGRAPHIC DATABASE. IF YOUR ORGANIZATION HAS NOT ORDERED OR RECEIVED ANY ERIC DOCUMENTS DURING THE PAST TWELVE MONTHS, PLEASE CHECK THIS BOX ☐ AND SKIP TO SECTION 6. OTHERWISE, PLEASE CONTINUE WITH QUESTION #5.1.

5.1 Please estimate the approximate number of ERIC documents ordered or received by your organization during the past twelve months:

	ORDERED OR RECEIVED FROM EDRS	ORDERED OR RECEIVED FROM OTHER SOURCE
a) ERIC microfiche documents		
b) ERIC papercopy documents		

SECTION 6

COMPUTERIZED SEARCHING OF THE ERIC BIBLIOGRAPHIC DATABASE

NOTE: THIS SECTION OF THE QUESTIONNAIRE DEALS WITH YOUR ORGANIZATION'S CONDUCT OR ORDERING OF COMPUTERIZED SEARCHES OF THE ERIC BIBLIOGRAPHIC DATABASE. IF YOUR ORGANIZATION HAS NOT CONDUCTED OR ORDERED ANY ONLINE OR BATCH SEARCHES OF THE ERIC DATABASE DURING THE PAST TWELVE MONTHS, PLEASE CHECK THIS BOX ☐ AND SKIP TO SECTION 7. OTHERWISE, PLEASE CONTINUE WITH QUESTION #6.1.

6.1 During which months do the highest amounts and lowest amounts of ERIC computer searching occur at your organization? (Please use the month codes displayed in the box at the left.)

Jan	01	Jul	07
Feb	02	Aug	08
Mar	03	Sep	09
Apr	04	Oct	10
May	05	Nov	11
June	06	Dec	12

a) Month with highest amounts of ERIC searching .... ☐

b) Month with lowest amounts of ERIC searching .... ☐

6.2 Have staff members of your organization conducted on-line computer searches of the ERIC bibliographic database during the past twelve months? (By "conduct" we mean that your staff members actually performed the online search through direct interaction with a computer terminal.)

Yes 1

No .... 2 (Skip to #6.6)

6.3 On the average, how many online searches of the ERIC bibliographic database are conducted by staff members of your organization per month? (Please base your response on the number of requests you receive which result in your performing an online search, regardless of the number of search commands or descriptor combinations which are used during the course of a single terminal session.)

a) Searches per month of only the ERIC database .... ☐

b) Searches per month of the ERIC database in combination with other databases .... ☐

c) Total (a + b = c) .... ☐

6.4 Approximately what percent of 6.3c, if any, is conducted in response to requests forwarded to you by other information providers (e.g., librarians, media specialists, linking agents, etc.) employed by organizations other than your parent organization? .... ☐ %

6.5 Please estimate the percent of online searches per month of ERIC which are conducted by your organization using the following systems:

Lockheed .... %

System Development Corporation (SDC) .... %

BRS .... %

Other online system (describe): ____________________________________

____ .... %

Total 100%

6.6 On the average, how many requests per month for online searches (of any database) does your organization transmit to other organizations? ....

6.7 Approximately what percent of 6.6 include searches of the ERIC bibliographic database? (Insert percent in box; use "NA" if your response to 6.6 is zero.) . %

6.8 Have staff members of your organization conducted or made arrangements for batch computer searches of the ERIC bibliographic database?

Yes 1

No .... 2 (Skip to Section 7)

6.9 On the average, how many batch searches per month of the ERIC bibliographic database are conducted or arranged for by staff members of your organization? (Insert number in box, zero (0) if none.) ....

6.10 For each of the batch ERIC search tasks below, please indicate who is responsible for performing that task most of the time . . . (1) staff members of your organization, (2) staff of other departments in your parent organization, or (3) staff of organizations other than your parent organization? (Circle 1, 2, or 3 for each task.)

	Staff Category		
Task	1. Own Staff	2. Other Department's Staff	3. Other Organization's Staff
a) Negotiating, receiving, or clarifying the request	1	2	3
b) Constructing the search statement (i.e., selecting descriptors, constructing search logic, etc.)	1	2	3
c) Running the batch search on the computer	1	2	3
d) Reviewing or screening the search output	1	2	3

SECTION 7

TRAINING AND PUBLISHING ACTIVITIES

NOTE: THIS SECTION DEALS WITH TRAINING AND PUBLISHING ACTIVITIES ENGAGED IN BY YOUR ORGANIZATION WHICH ARE RELATED TO ERIC PRODUCTS AND SERVICES.

7.1 Which (if any) of the following ERIC -related activities has your organization engaged in during the past twelve months? (Circle 1 for yes, 2 for no, 3 for don't know.)

	YES	NO	DON'T KNOW
a) Formal training sessions for students or employees of your organization or its parent organization (e.g., lectures, tours, supervised hands-on instruction) which concentrated primarily on ERIC products and services	1	2	3
b) Formal training sessions for individuals outside your organizations or its parent organization which concentrated primarily on ERIC products and services	1	2	3
c) Formal training sessions for students or employees of your organization or parent organization which included ERIC along with other information products or services	1	2	3
d) Same as (c), but conducted for individuals outside your organization or parent organization	1	2	3

7.2 During the last twelve months, approximately how many individuals has your organization trained to use ERIC products or services during the course of any of its regularly conducted training sessions, classes or educational programs? (Insert number in space, zero if none, "DK" for Don't Know.) .... ☐

7.3 During the past twelve months, approximately how many of the following types of publications has your organization produced which either concentrated on or were based on ERIC ? (For each publication type, please supply (a) the number of different items produced as well as (b) an estimate of the total number of copies distributed.

Publication Type	Number of Items Produced	Number of Copies Distributed
a) Issues of Newsletters (brief, regularly-produced publications designed to keep people up-to-date about happenings within a particular organization or field)	☐	☐
b) Specialized bibliographies (lists of bibliographic references and/or abstracts which deal with specific fields or subjects)	☐	☐
c) Analytical or review publications (publications which analyze, synthesize, or criticize the literature in a specific field or subject)	☐	☐
d) Other (please describe) ________________ ________________ ________________	☐	☐
e) Other (please describe) ________________ ________________ ________________	☐	☐

SECTION 8: HOURS DEVOTED TO CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)

PLEASE CHECK HERE IF YOUR ORGANIZATION DOES NOT SUBSCRIBE TO ERIC 'S CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE) ☐, AND SKIP TO SECTION 9. IF YOUR ORGANIZATION DOES SUBSCRIBE TO CIJE, PLEASE CONTINUE WITH QUESTION #8.1.

8.1 For each employee category below, please estimate how many hours, on an average monthly basis, are devoted by your organization's staff to User Support activities associated with ERIC's Current Index to Journals in Education (CIJE). Please include staff time devoted to the following:

- Negotiating requests which result in the consulting of CIJE by requestors or your organization's staff
- Consulting, examining, or searching CIJE
- Showing people how to use CIJE
- Copying and/or distributing pages of CIJE in response to requests for information

Please exclude staff time devoted to:

- Formal orientation or training programs given by your staff which cover ERIC

EMPLOYEE CATEGORY	DEFINITION	AVERAGE OR APPROXIMATE HOURLY RATE*	HOURS PER MONTH FOR CURRENT INDEX TO JOURNALS IN EDUCATION
a) Information Professional	Bachelor's degree or higher in an information profession such as library or information services, media services or production, or computer science.	$ ______ /hr.	
b) Education Professional	Bachelor's degree or higher (and/or certification) in education or an education-related field (e.g., counseling, educational psychology, etc.).	$ ______ /hr.	
c) Other Professional	An individual with a bachelor's degree or higher in a field other than (a) or (b).	$ ______ /hr.	
d) Technical or Clerical	Persons with less than a bachelor's degree, other than temporary or part-time student employees.	$ ______ /hr.	
e) Student Employees	Students employed on a temporary or part-time basis.	$ ______ /hr.	

*Please include fringe benefits, pension, hospitalization, and other labor overhead items.

SECTION 9

INCOME FROM THE SALE OR DISTRIBUTION OF ERIC PRODUCTS OR SERVICES

NOTE: THIS SECTION DEALS WITH YOUR ORGANIZATION'S INCOME FROM THE SALE OR DISTRIBUTION OF ERIC PRODUCTS OR SERVICES, EITHER FROM CHARGES LEVIED ON INDIVIDUALS OR FROM CONTRACTUAL OR FORMAL ARRANGEMENTS WITH OTHER ORGANIZATIONS. IF DURING THE PAST 12 MONTHS YOUR ORGANIZATION HAS NOT DERIVED MORE THAN $100 IN INCOME FROM YOUR PROVISION OF ANY ERIC INFORMATION PRODUCTS OR SERVICES, PLEASE CHECK THIS BOX ☐ AND SKIP TO #9.2. OTHERWISE, PLEASE CONTINUE WITH QUESTION #9.1.

9.1 The purpose of this question is to obtain an estimate of the income your organization has derived during the past 12 months from providing ERIC information products or services. Two income types are considered: (1) income from contractual or other formal arrangements with other organizations, and (2) income from sales to or payment by individuals. By "contractual or other arrangements" we mean agreements whereby your organization is reimbursed, by organizations other than ERIC , on an annual, monthly, or other regular basis. By "individuals" we mean students or employees of any organization (including your own) who pay for ERIC products and services, e.g., who pay for hardcopies of ERIC microfiche reports. Please include only the income derived from ERIC products or services excluding income derived from, for example, searches of bibliographic databases other than ERIC.

	CONTRACTUAL ARRANGEMENTS	INDIVIDUAL PAYMENTS
a) Sale, copying, or reproduction of ERIC paper or microfiche documents	$	$
b) Computerized searching of the ERIC bibliographic database by itself or in conjunction with other databases	$	$
c) Other information services based on use of ERIC products or services (describe): __________________________ __________________________ ____________________	$	$
d) Total (a + b + c)	$	$

9.2

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE; PLEASE RETURN IT WITH ANY EXPLANATORY COMMENTS OR QUESTIONS TO:

King Research, Inc.
P.O. Box 71
Rockville, Md. 20850

ERIC COST AND USAGE STUDY
ACCESS POINT PRIMARY SURVEY
— REQUEST FOR COOPERATION —

Dear Eric Provider:

The purpose of this Request for Cooperation is to ask for your organization's help in Part 2 of the ERIC Access Point Survey. Part 2 is the Access Point Primary Survey. In the Primary Survey we will ask a sample of ERIC "access point" organizations to monitor the use of a particular ERIC product or service for a period of up to three weeks during the first three months of 1981. Using the ERIC Request Card (specimen enclosed), cooperating organizations will supply us with information from which we will develop a sample of ERIC requestors. We will then survey these individuals by mail to study the uses they make of the ERIC information obtained from your organization.

We will ask you to monitor requests for and/or use of ERIC products and services in one of the following categories:

1. Resources in Education (RIE)
2. Current Index to Journals in Education (CIJE)
3. ERIC Documents (microfiche and hardcopy, including locally-produced ERIC documents and bibliographies)
4. Computer searches of the ERIC bibliographic database.

We have circled the category which we will ask you (if you agree to cooperate) to monitor during the special data collection period. (ERIC Clearinghouses: we will ask you to monitor only one category per week during the Fall, for a total of four weeks.)

Based on estimates of ERIC usage reported in your Screener Survey, we will supply you with ERIC Request Cards plus instructions for their completion. During your assigned data collection period, you should assign staff to monitor theERIC product or service we have identified above. Each time any individual (including your organization's staff) requests or uses the ERIC product or service during that time, your assigned monitor should fill out a Request Card. In most cases, only the first few questions will require contact with the ERIC user, while the rest of the questions can, for the most part, be answered from observation. At the end of the week, you will forward the filled-out Request Cards to King Research. We will then use the cards to (1) estimate the number of times ERIC is requested or used at sampled organizations, and (2) develop a sample of ERIC requestors with whom we will conduct the mail survey as described above.

Some additional details:

(1) The data collection period (up to three weeks) we assign to you will be based on your hours of service as well as on a random selection process based on your Screener Survey responses.

(2) The names and addresses of all individuals involved in the survey will be destroyed after the survey is completed. Only the Project Director and other key individuals on the King Research staff will have access to these names and addresses.

(3) The Primary Survey and its subsequent ERIC Requestor Survey are not an evaluation of your organization's performance. We are solely interested in obtaining unbiased data on ERIC usage. No data will be linked with any individuals or specific organizations in our final report. In fact, we will only acknowledge your organization's participation in this project if you request us to do so.

Whether or not you are able to participate, please check the appropriate box below and supply us with the requested information: (1) the name and telephone number of a contact person at your organization who can monitor your organization's participation in Phase 2; (2) your organization's hours of service during the Winter; (3) a brief description of the physical and organizational location of your organization's ERIC-related operations; or (4) the reasons for your inability to participate.

We are asking you to volunteer some staff time to participate in this project. We realize that you may receive such requests to aid in filling out surveys. Our response is that all the data collected in this study is designed to help improve the understanding of how ERIC is used. Ultimately, this will aid in improving what is already the premier information system in education and educational research. Since ERIC is such a highly decentralized information system, it is imperative that we obtain a good picture of the ERIC usage which is facilitated by access points such as your organization.

If you have any questions about your cooperation in Phase 2 of this study, please do not hesitate to call the Project Director, Dr. Dennis McDonald (collect) at (202) 861-0640 or the Survey Director, Ms. Kathy O'Brien (collect) at (301) 881-6766.

☐ Yes; we can participate in Phase 2 of the Access Point Survey. The name, title, and telephone number of our contact person are:

Name: ____________________

Title: ____________________

Telephone: ____________________

☐ No; we cannot participate in Phase 2 of the Access Point Survey, for the following reasons:

____

____

____

Please return this form and (1) your organization's hours of service and (2) a brief description of your ERIC operations to

King Research, Inc.
P.O. Box 71
Rockville, MD 20850

This study is sponsored by the National Institute of Education under contract number 400-79-0060.

PLEASE PRINT

ERIC COST and USAGE STUDY
– ERIC REQUEST CARD –

USE BLACK INK

This is a voluntary survey being conducted under contract to the National Institute of Education (NIE) by King Research, Inc., P.O. Box 71, Rockville, Maryland 20850, (301) 881-6766.

MONTH ☐☐ DAY ☐☐ I.D. NUMBER ☐

NAME OF REQUESTOR:

MAILING ADDRESS INCLUDING ZIP CODE: ______________________

TELEPHONE NUMBER (_____) ______________________
Area Code NUMBER

TITLE OR TOPIC OF REQUEST:

SPECIMEN

1. TYPE OF PRODUCT OR SERVICE INVOLVED (Circle all applicable codes)

ERIC's RIE	01
ERIC's CIJE	02
ERIC Online Search	03
ERIC Batch Search	04
ERIC Microfiche	05
ERIC Printed Report	06
ERIC Printed Bibliography	07
Other Printed Indexes	08
Other Computer Databases	09
Other Documents	10
Other (Describe) ______________________	11

2. WAS THE ERIC THESAURUS USED? (Circle 1, 2, or 3)

Yes	1
No	2
Don't Know	3

3. WAS REQUESTOR ASSISTED BY STAFF? (Circle 1, 2, or 3)

Yes	1
No	2
Requestor was a Staff Member	3

4. HOW WAS REQUEST RECEIVED? (Circle 1, 2, 3, or 4)

In Person	1
Telephone	2
Mail	3
Other (Describe) ______________________	4

5. HOW WAS RESPONSE DELIVERED? (Circle all applicable codes)

In Person	1
Telephone	2
Mail	3
Other (Describe) ______________________	4

Separate Versions of Section 8

Separate versions of this section were used in the Screener Survey depending upon the list from which the access point was sampled, i.e. organizations sampled from the list of RIE subscribers received the questionnaire with the RIE section 8, and so on.

All ERIC Clearinghouses (and the Facility) received all four versions of the Section 8 (RIE, CIJE, Searches, Documents), and this group also received the Section 8 devoted to ERIC "referral services".

SECTION 8: HOURS DEVOTED TO RESOURCES IN EDUCATION (RIE)

PLEASE CHECK HERE IF YOUR ORGANIZATION DOES NOT SUBSCRIBE TO ERIC'S RESOURCES IN EDUCATION (RIE) ☐, AND SKIP TO SECTION 9. IF YOUR ORGANIZATION DOES SUBSCRIBE TO RIE, PLEASE CONTINUE WITH QUESTION #8.1.

8.1 For each employee category below, please estimate how many hours, on an average monthly basis, are devoted by your organization's staff to User Support activities associated with ERIC's Resources in Education (RIE). Include time devoted to the following:

- Negotiating requests which result in the consulting of RIE by requestors or your organization's staff
- Consulting, examining, or searching RIE
- Showing people how to use RIE
- Copying and/or distributing pages of RIE in response to requests for information

Please exclude staff time devoted to:

- Formal orientation or training programs given by your staff which cover ERIC

EMPLOYEE CATEGORY	DEFINITION	AVERAGE OR APPROXIMATE HOURLY RATE*	HOURS PER MONTH FOR RESOURCES IN EDUCATION
a) Information Professional	Bachelor's degree or higher in an information profession such as library or information services, media services or production, or computer science.	$ ______ /hr.	
b) Education Professional	Bachelor's degree or higher (and/or certification) in education or an education-related field (e.g., counseling, educational psychology, etc.).	$ ______ /hr.	
c) Other Professional	An individual with a bachelor's degree or higher in a field other (a) or (b).	$ ______ /hr.	
d) Technical or Clerical	Persons with less than a bachelor's degree, other than temporary or part-time employees.	$ ______ /hr.	
e) Student Employees	Students employed on a temporary or part-time basis	$ ______ /hr.	

*Please include fringe benefits, pension, hospitalization, and other labor overhead items.

SECTION 8: HOURS DEVOTED TO ERIC COMPUTER SEARCHING

PLEASE CHECK HERE IF YOUR ORGANIZATION DOES NOT CONDUCT OR MAKE ARRANGEMENTS FOR COMPUTER SEARCHES OF THE ERIC BIBLIOGRAPHIC DATABASE ☐, AND SKIP TO SECTION 9. IF YOUR ORGANIZATION DOES CONDUCT OR MAKE ARRANGEMENTS FOR SEARCHES OF THE ERIC DATABASE, PLEASE CONTINUE WITH QUESTION #8.1.

8.1 For each employee category below, please estimate how many hours, on an average monthly basis, are devoted by your organization's staff to conducting or making arrangements for any computer searches which result in searching the ERIC bibliographic database. Please include staff time devoted to the following:

- Negotiating requests which result in searches of the ERIC bibliographic database
- Constructing search statements
- Interacting with or operating the computer system
- Reviewing or screening the search output

Please exclude the following:

- Time devoted to searches which do not include the ERIC database
- Formal orientation or training programs which cover ERIC
- Obtaining, copying, or distributing documents retrieved through the ERIC search

EMPLOYEE CATEGORY	DEFINITION	AVERAGE OR APPROXIMATE HOURLY RATE*	HOURS PER MONTH FOR ERIC COMPUTER SEARCHING
a) Information Professional	Bachelor's degree or higher in an information profession such as library or information services, media services or production, or computer science.	$ ______ /hr.	
b) Education Professional	Bachelor's degree or higher (and/or certification) in education or an education-related field (e.g., counseling, education psychology, etc.).	$ ______ /hr.	
c) Other Professional	An individual with a bachelor's degree or higher in a field other than (a) or (b).	$ ______ /hr.	
d) Technical or Clerical	Persons with less than a bachelor's degree, other than temporary or part-time student employees.	$ ______ /hr.	
e) Student Employees	Students employed on a temporary or part-time basis.	$ ______ /hr.	

*Please include fringe benefits, pension, hospitalization, and other labor overhead items.

SECTION 8: HOURS DEVOTED TO ERIC DOCUMENTS

PLEASE CHECK HERE IF YOUR ORGANIZATION DOES NOT HAVE A COLLECTION OF ERIC DOCUMENTS ☐, AND SKIP TO SECTION 9. [SEE SECTION 4 FOR A DEFINITION OF "ERIC DOCUMENTS."] IF YOUR ORGANIZATION DOES HAVE A COLLECTION OF ERIC DOCUMENTS, PLEASE CONTINUE WITH QUESTION #8.1.

8.1. For each employee category below, please estimate how many hours, on an average monthly basis, are devoted by your organization's staff to User Support activities associated with ERIC documents. Please include staff time devoted to the following:

- Negotiating requests which result in consulting, retrieving, or copying ERIC documents.
- Consulting, retrieving, or copying ERIC documents in response to requests for information or documents.
- Showing people how to consult, retrieve, or copy ERIC documents.
- Distributing copies of ERIC documents in response to individual orders or requests.

Please exclude the following activities from User Support:

- Formal orientation or training programs given by your staff which cover ERIC
- Consulting or using ERIC's Resources in Education (RIE) or ERIC's Current Index to Journals in Education (CIJE).
- Time spent preparing or distributing locally-produced documents, newsletters, or bibliographies which normally do not receive ERIC "ED" identification numbers.
- Time spent re-shelving or re-filing ERIC documents.

EMPLOYEE CATEGORY	DEFINITION	AVERAGE OR APPROXIMATE HOURLY RATE*	HOURS PER MONTH FOR ERIC DOCUMENTS
a) Information Professional	Bachelor's degree or higher in an information profession such as library or information services, media services or production, or computer science.	$ ______ /hr.	
b) Education Professional	Bachelor's degree or higher (and/or certification) in education or an education-related field (e.g., counseling, educational psychology, etc.).	$ ______ /hr.	
c) Other Professional	An individual with a bachelor's degree or higher in a field other than (a) or (b).	$ ______ /hr.	
d) Technical or Clerical	Persons with less than a bachelor's degree, other than temporary or part-time student employees.	$ ______ /hr.	
e) Student Employees	Students employed on a temporary or part-time basis.	$ ______ /hr.	

*Please include fringe benefits, pension, hospitalization, and other labor overhead items.

SECTION 8: HOURS DEVOTED TO PROVIDING REFERRAL SERVICES

NOTE: IN THE PREVIOUS FOUR QUESTIONS YOU REPORTED YOUR ORGANIZATION'S STAFF TIME DEVOTED TO USING PARTICULAR ERIC PRODUCTS OR SERVICES. IN THIS QUESTION, PLEASE REPORT ON STAFF TIME DEVOTED TO PROVIDING REFERRAL SERVICES, IRRESPECTIVE OF THE INFORMATION SOURCES USED BY YOUR STAFF WHEN PROVIDING REFERRAL SERVICES. DEFINITION: A "REFERRAL" OCCURS WHEN YOUR ORGANIZATION RESPONDS TO AN INFORMATION REQUEST BY SUPPLYING THE REQUESTOR WITH NAMES OF PROGRAMS, ORGANIZATIONS, OR INDIVIDUALS WHOM THAT REQUESTOR CAN THEN CONTACT TO OBTAIN INFORMATION OR ASSISTANCE.

8.1 For each employee category below, please estimate how many hours, on an average monthly basis, are devoted by your organization's staff to providing referral services. Please include staff time devoted to the following:

- Negotiating requests which result in your providing referral services
- Consulting, retrieving, or copying any documents to support your development of a response
- Contacting any other person or organization to support your development of a response
- Contacting the requestor in order to provide a response

Please exclude the following activities:

- Time spent obtaining, preparing or distributing information products or services which are not designed primarily to support your referral services.

EMPLOYEE CATEGORY	DEFINITION	AVERAGE OR APPROXIMATE HOURLY RATE*	HOURS PER MO. REFERRAL SERVICES
a) Information Professional	Bachelor's degree or higher in an information profession such as library or information services, media services or production, or computer science.	$ ______ /hr.	
b) Education Professional	Bachelor's degree or higher (and/or certification) in education or an education-related field (e.g., counseling, educational psychology, etc.).	$ ______ /hr.	
c) Other Professional	An individual with a bachelor's degree or higher in a field other than (a) or (b).	$ ______ /hr.	
d) Technical or Clerical	Persons with less than a bachelor's degree, other than temporary or part-time student employees.	$ ______ /hr.	
e) Student Employees	Students employed on a temporary or part-time basis.	$ ______ /hr.	

*Please include fringe benefits, pension, hospitalization, and other labor overhead items.

8.2 On the average, approximately how many requests per month does your organization receive which result in your providing referral services? ☐

8.3 Approximately what percent of the above referral requests are satisfied by relying primarily on RIE, CIJE, the ERIC database, or ERIC documents which are available for sale through EDRS? ☐ %

B.5 Screener Questionnaire File Description

On the following pages are displayed the description of the SPSS records for the Screener Survey as they appear in the data file, as well as a listing of the individual "created" variables which were used for calculating the weights and sorting the data.

```
//   JOB (M516,9309),LEVITZ,CLASS=Q
/*NOSETUP
//*COMMENT    RUN TO SAVE ERIC COMPLETED DATA AND PROGRAM
//PROCLIB DD DSN=CCIAPP.PROCLIB,DISP=SHR
//   EXEC SPSS
//FT04F001 DD UNIT=3350,DSN=WYL.H2KRI1.ERICCOMP,DISP=(OLD),
//   SPACE=(TRK,(20,10),RLSE),DCB=BLKSIZE=6200,VOL=SER=TS01
//FT08F001 DD DSN=WYL.H2KRI1.CLRDATA,DISP=(OLD,KEEP),
//   UNIT=3350,VOL=SER=TS01,
//   DCB=(RECFM=FB,LRECL=80,BLKSIZE=720)
// DD DSN=WYL.H2KRI1.ERIC.DATA2,DISP=(OLD,KEEP),
//    UNIT=3350,VOL=SER=TS01,DCB=(RECFM=FB,LRECL=80,BLKSIZE=720)
//SYSIN DD *
NUMBERED        YES
RUN NAME        ERIC SAVE RUN USING 10 CARDS PER CASE
DATA LIST       FIXED (10) / 1 ID1 1-5 CARD1 6
                ZIP 8-10    Q1P2 11-12 Q1P3 13
                Q1P4 14     Q1P5 15    Q1P6 16-17
                Q1P7 18-26  Q2P0 27    Q2P1A 28-29
                Q2P1B 30-31 Q2P2A 32-33 Q2P2B 34-35
                Q2P3 36-39   Q2P4 40    Q3P0 41
                Q3P1A 42-43  Q3P1B 44-45  Q3P2A 46-47
                Q3P2B 48-49  Q3P3 50-53   Q3P4 54
                Q4P0 55 Q4P1 56 Q4P2 57
                Q4P3 58 Q4P4A 59-66 Q4P4B 67-74
                Q4P5A 75-76 Q4P5B 77-78/ 2 ID2 1 CARD2 6
                Q4P6A 8-15 Q4P6B 16-23 Q4P7A 24-26
                Q4P7B 27-29 Q4P7C 30-32 Q4P8A 33-40
                Q4P8B 41-48
                Q4P9 49-51 Q4P10 52 Q4P11 53-57
                Q4P12 58-60 Q4P13 61 Q4P14 62-63
                Q4P15 64 Q4P16 65-72 Q4P17 73-77
                Q4P18 78-80/ 3 ID3 1-5 CARD3 6
                Q5P0 8 Q5P1A1 9-14 Q5P1A2 15-20
                Q5P1B1 21-26 Q5P1B2 27-32 Q6P0 33
                Q6P1A 34-35 Q6P1B 36-37 Q6P2 38
                Q6P3A 39-42 Q6P3B 43-46 Q6P3C 47-51
                Q6P4 52-54 Q6P5A 55-57 Q6P5B 58-60
                Q6P5C 61-63 Q6P5D 64-66 Q6P6 67-70
                Q6P7 71-73 Q6P8 74 Q6P9 75-78/ 4
                ID4 1-5 CARD4 6
                Q6P10A 8 Q6P10B 9 Q6P10C 10
                Q6P10D 11 Q7P1A 12 Q7P1B 13
                Q7P1C 14 Q7P1D 15 Q7P2 16-20
                Q7P3A1 21-23 Q7P3A2 24-29
                Q7P3B1 30-32
                Q7P3B2 33-38 Q7P3C1 39-41 Q7P3C2 42-47
                Q7P3D1 48-50 Q7P3D2 51-56 Q7P3E1 57-59
                Q7P3E2 60-65/ 5 ID5 1-5 CARD5 6
                Q8P0A 8 Q8P1A1A 9-12 Q8P1A2A 13-16
                Q8P1B1A 17-20 Q8P1B2A 21-24 Q8P1C1A 25-28
                Q8P1C2A 29-32 Q8P1D1A 33-36 Q8P1D2A 37-40
                Q8P1E1A 41-44 Q8P1E2A 45-48 Q8P2A 49-52 Q8P3A 53-55/
                6 ID6 1-5 CARD6 6
                Q8P0B 8 Q8P1A1B 9-12 Q8P1A2B 13-16
                Q8P1B1B 17-20 Q8P1B2B 21-24 Q8P1C1B 25-28
                Q8P1C2B 29-32 Q8P1D1B 33-36 Q8P1D2B 37-40
                Q8P1E1B 41-44 Q8P1E2B 45-48 Q8P2B 49-52 Q8P3B 53-55/
                7 ID7 1-5 CARD7 6
                Q8P0C 8 Q8P1A1C 9-12 Q8P1A2C 13-16
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               Q8P1B1C 17-20 Q8P1B2C 21-24 Q8P1C1C 25-28
               Q8P1C2C 29-32 Q8P1D1C 33-36 Q8P1D2C 37-40
               Q8P1E1C 41-44 Q8P1E2C 45-48 Q8P2C 49-52 Q8P3C 53-55/
               8 ID8 1-5 CARD8 6
               Q8POD 8 Q8P1A1D 9-12 Q8P1A2D 13-16
               Q8P1B1D 17-20 Q8P1B2D 21-24 Q8P1C1D 25-28
               Q8P1C2D 29-32 Q8P1D1D 33-36 Q8P1D2D 37-40
               Q8P1E1D 41-44 Q8P1E2D 45-48 Q8P2D 49-52 Q8P3D 53-55/
               9 ID9 1-5 CARD9 6
               Q8POE 8 Q8P1A1E 9-12 Q8P1A2E 13-16
               Q8P1B1E 17-20 Q8P1B2E 21-24 Q8P1C1E 25-28
               Q8P1C2E 29-32 Q8P1D1E 33-36 Q8P1D2E 37-40
               Q8P1E1E 41-44 Q8P1E2E 45-48 Q8P2E 49-52 Q8P3E 53-55/
               10 ID10 1-5 CARD10 6
               Q9PO 8 Q9P1A1 9-16 Q9P1A2 17-24
               Q9P1B1 25-32 Q8P1B2 33-40 Q9P1C1 41-48
               Q9P1C2 49-56 Q9P1D1 57-64 Q9P1D2 65-72
               Q10 73
INPUT MEDIUM   TAPE
N OF CASES     UNKNOWN
MISSING VALUES Q1P3,Q1P4,Q1P5,Q10(9)/
               Q1P6(98,99)/
               Q2P1A,Q2P1B,Q2P2A,Q2P2B(77,98,99)/
               Q2P4,Q3P4(7,8,9)/
               Q3P1A,Q3P1B,Q3P2A,Q3P2B(77,98,99)/
               Q4P1,Q4P2,Q4P3(7,9)/
               Q4P5A,Q4P5B(77,98,99)/
               Q4P18(777,998,999)
MISSING VALUES Q4P17,Q4P11(77777,99998,99999)/
               Q4P7A,Q4P7B,Q4P7C,Q4P9(777,998,999)/
               Q4P10,Q4P13(7,8,9)/
               Q4P12(777,998,999)/
               Q4P14(77,98,99)/
               Q4P15(3,7,9)
MISSING VALUES Q5P1A2,Q5P1B1,Q5P1B2(777777,999998,999999)/
               Q6P1A,Q6P1B(77,98,99)/
               Q6P2,Q6P8,Q6P10A,Q6P10B,Q6P10C,Q6P10D(7,9)/
               Q6P3B(7777,9998,9999)/
               Q6P4,Q6P5A,Q6P5B,Q6P5C,Q6P5D(777,998,999)/
               Q6P6(7777,9998,9999)/
               Q6P7(777,998,999)/
               Q6P9(7777,9998,9999)
MISSING VALUES Q7P1A,Q7P1B,Q7P1C,Q7P1D(3,9)/
               Q7P3A1,Q7P3B1,Q7P3C1,Q7P3D1,Q7P3E1(777,998,999)/
               Q7P3A2,Q7P3B2,Q7P3C2,Q7P3D2,Q7P3E2
               (777777,999998,999999)
MISSING VALUES Q8POA,Q8POB,Q8POC,Q8POD,Q8POE(7)/
               Q8P1A2A,Q8P1A2B,Q8P1A2C,Q8P1A2D,Q8P1A2E,
               Q8P1B2A,Q8P1B2B,Q8P1B2C,Q8P1B2D,Q8P1B2E,
               Q8P1C2A,Q8P1C2B,Q8P1C2C,Q8P1C2D,Q8P1C2E,
               Q8P1D2A,Q8P1D2B,Q8P1D2C,Q8P1D2D,Q8P1D2E,
               Q8P1E2A,Q8P1E2B,Q8P1E2C,Q8P1E2D,Q8P1E2E
               (7777,9998,9999)/
               Q8P1A1A,Q8P1A1B,Q8P1A1C,Q8P1A1D,Q8P1A1E,
               Q8P1B1A,Q8P1B1B,Q8P1B1C,Q8P1B1D,Q8P1B1E,
               Q8P1C1A,Q8P1C1B,Q8P1C1C,Q8P1C1D,Q8P1C1E,
               Q8P1D1A,Q8P1D1B,Q8P1D1C,Q8P1D1D,Q8P1D1E,
               Q8P1E1A,Q8P1E1B,Q8P1E1C,Q8P1E1D,Q8P1E1E
               (7777,9998,9999)
MISSING VALUES Q8P2A,Q8P2B,Q8P2C,Q8P2D,Q8P2E(7777,9998,9999)
MISSING VALUES Q8P3A,Q8P3B,Q8P3C,Q8P3D,Q8P3E(777,998,999)
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        MISSING VALUES Q9PO(7,9)
        MISSING VALUES Q9P1A1,Q9P1A2,Q9P1B1,Q9P1B2,Q9P1C1,Q9P1C2,
                       Q9P1D1,Q9P1D2(77777776,88888880,99999984)
        MISSING VALUES Q4P16,Q9P1A1,Q9P1A2,Q9P1B1,Q9P1B2,Q9P1C1,Q9P1C2,
                       Q9P1D1,Q9P1D2(77777777,88888888,99999999)
        MISSING VALUES Q4P16(77777776)
        MISSING VALUES Q1P7(777777664,999999744)/
                       Q7P2(77777,99998,99999)/
                       Q4P4B(77777760,77777776,99999984)/
                       Q6P3C(77777,99998,99999)/
                       Q2P3(7777,9998,9999)/
                       Q4P4A(77777776,99999984)/
                       Q4P6A(77777760,77777776,88888880)
        MISSING VALUES Q4P6A(99999984)/
                       Q4P8B(77777776,88888880,99999984)/
                       Q9P1D2(77777776)/
                       Q5P1A1(777777,999998,999999)/
                       Q4P6B(77777776,88888880,99999536)
        MISSING VALUES Q4P6B(99999984)/
                       Q3P3(7777,9998,9999)/
                       Q9P1B2(77777776)/
                       Q6P3A(7777,9998,9999)/
                       Q4P8A(77777776,88888880,99999984)
        VAR LABELS     Q1P2 ORGANIZATION DESCRIPTIION/
                       Q1P3 PRIMARY FUNCTION IN SERVICES/
                       Q1P4 WHICH IS LARGEST GROUP OF USERS/
                       Q1P5 ARE SRVS PROMOTING ED OR TRNING ACTIVITIES/
                       Q1P6 SOURCE OF FINANCIAL SUPPORT/
                       Q1P7 MOST RECENT YEAR BUDGET DATA/
                       Q2PO DOES ORG SUBSCRIBE TO RIE?/
                       Q2P1A # RIE CURRENT SUBSCRIPTIONS/
                       Q2P1B # CURRENT RIE SEMI-ANNUAL SUBS/
                       Q2P2A MONTH HIGHEST RIE USE/
                       Q2P2B MONTH LOWEST RIE USE/
                       Q2P3 # TIMES STAFF CONSULTS RIE PER MONTH/
                       Q2P4 # UNASSISTED RIE USE COMPARED TO STAFF/
                       Q3PO DOES ORG HAVE SUBS TO CIJE?/
                       Q3P1A # MONTHLY CIJE SUBSCRIPTIONS/
                       Q3P1B # SEMI-ANN CIJE SUBS/
                       Q3P2A MONTH HIGHEST CIJE USAGE/
                       Q3P2B MONTH LOWEST CIJE USAGE/
                       Q3P3 # TIMES STAFF CONSULTS CIJE PER MONTH/
                       Q3P4 UNASSISTED CIJE USE COMPARED TO STAFF/
                       Q4PO DOES ORG HAVE ERIC DOCUMENTS?/
                       Q4P1 DOES ORG HAVE ERIC MICROFICHE?/
                       Q4P2 IS ORG SOC FOR ERIC DOCUMENTS?/
                       Q4P3 IS THE MICROFICHE A CLOSED COLLECTION?/
                       Q4P4A # IND PIECES MICROFICHE?/
                       Q4P4B # IND TITLES MICROFICHE/
                       Q4P5A MONTH HIGHEST FICHE USAGE/
                       Q4P5B MONTH LOWEST FICHE USAGE/
                       Q4P6A # TIMES PER MONTH FICHE USED/
                       Q4P6B # TIMES FICHE TITLES USED/
                       Q4P7A # MICROFORM READERS/
                       Q4P7B # MICROFORM READER-PRINTERS/
                       Q4P7C # OTHER MICROFICHE TO PAPER EQUIPMENT/
                       Q4P8A # DUPE PAGES MADE BY IND USERS/
                       Q4P8B # DUPE PAGES MADE BY STAFF/
                       Q4P9 # DUPE PGS MADE BY STAFF FOR OTH ORG/
                       Q4P10 CAN ORG DUPLICATE MICROFICHE?/
                       Q4P11 # DUPLICATE MICROFICHE MADE PER MONTH/
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183.          Q4P12 % OF Q4P11 FORWARDED BY OTH INFOR PROVIDERS/
184.          Q4P13 DOES ORG HAVE DEPOSIT ACCOUNT WITH EDRS/
185.          Q4P14 # COPIES THESAURUS ERIC DESCRIPTORS/
186.          Q4P15 DOES ORG HAVE ERIC DOCUMENTS IN PAPER?/
187.          Q4P16 # ERIC PAPER DOCUMENTS/
188.          Q4P17 # TIMES PAPER COPY BORROWED OR USED/
189.          Q4P18 % PAPER DOC BRRWED BY REQ FROM OTH ORG/
190.          Q5P0 HAS ORG RECEIVED ERIC DOCUMENTS?/
191.          Q5P1A1 # ERIC MICROFICHE ORDERED FROM EDRS/
192.          Q5P1A2 # ERIC MICROFICHE ORDERED FROM OTH SOURCES/
193.          Q5P1B1 # PAPER DOC ORDERED FROM EDRS/
194.          Q5P1B2 # PAPER DOC ORDERED FROM OTHER SOURCES/
195.          Q6P0 HAS ORG PERFORMED ONLINE SEARCHES?/
196.          Q6P1A MONTH WITH HIGHEST # ERIC SEARCHES/
197.          Q6P1B MONTH WITH LOWEST # ERIC SEARCHES/
198.          Q6P2 HAS STAFF USED THE ON-LINE DATABASES?/
199.          Q6P3A # STAFF SEARCHES JUST ERIC DATABASES/
200.          Q6P3B # STAFF SEARCHES ERIC AND OTHER DATABASES/
201.          Q6P3C # SRCHES ERIC + ERIC AND OTHER DATABASES/
202.          Q6P4 % OF SRCHES SENT BY OTHER INFO PROVIDERS/
203.          Q6P5A % SEARCHES USING LOCKHEED/
204.          Q6P5B % SEARCHES USING SDC/
205.          Q6P5C % SEARCHES USING PRS/
206.          Q6P5D $ SEARCHES USING OTHER SYSTEMS/
207.          Q6P6 # ON-LINE SEARCHES SENT TO OTHER ORG/
208.          Q6P7 % SRCHES SENT TO OTH ORG ON ERIC DATABASE/
209.          Q6P8 HAS STAFF MADE BATCH ERIC SEARCHES?/
210.          Q6P9 # BATCH SEARCHES ERIC BY STAFF/
211.          Q6P10A NEGOT, RECEIVE OR CLARIFY REQUEST/
212.          Q6P10B CONSTRUCTING SEARCH STATEMENT/
213.          Q6P10C RUNNING BATCH SEARCHES/
214.          Q6P10D REVIEW THE SEARCH OUTPUT/
215.          Q7P1A HELD TRAINING SESSIONS EMP WITHIN ORG/
216.          Q7P1B TRAIN SESS PEOPLE OUTSIDE ORG/
217.          Q7P1C TRN SESS ORG EMP ERIC AND OTHER DATABASES/
218.          Q7P1D SAME AS Q7P1C BUT OUTSIDE ORG/
219.          Q7P2 # PEOPLE DURING LAST YEAR TO USE ERIC/
220.          Q7P3A1 # NEWSLETTERS PRODUCED/
221.          Q7P3A2 # COPIES NEWSLETTERS DISTRIBUTED/
222.          Q7P3B1 # SPEC BIBLIOGRAPHIES PRODUCED/
223.          Q7P3B2 # SPEC BIBLIOGRAPHIES DISTRUBITED/
224.          Q7P3C1 # ANALYTIC OR REV PUB PRODUCED/
225.          Q7P3C2 # ANALYTIC OR REV PUB DISTRIBUTED/
226.          Q7P3D1 # ITEMS PRODUCED OTHER/
227.          Q7P3D2 # COPIES DISTRIBUTED OTHER/
228.          Q7P3E1 # ITEMS PRODUCED OTHER/
229.          Q7P3E2 # COPIES DISTRIBUTED OTHER/
230.          Q8P1A1A INF PROFESS. HRLY RATE/
231.          Q8P1A2A INF PROFESS. HRS PER MONTH/
232.          Q8P1B1A EDUCATIONAL PROF. HRLY RATE/
233.          Q8P1B2A EDUCATIONAL PROF. HRS PER MONTH/
234.          Q8P1C1A OTHER PROFESSIONAL HRLY RATE/
235.          Q8P1C2A OTHER PROFESSIONAL HRS PER MONTH/
236.          Q8P1D1A TECH OR CLERICAL HRLY RATE/
237.          Q8P1D2A TECH OR CLERICAL HRS PER MONTH/
238.          Q8P1E1A STUDENT HRLY RATE/Q8P1E2A STUDENT HRS PER MONTH/
239.          Q8P2A AVE # REQTS RECVD PER MONTH FOR REFERRALS/
240.          Q8P3A % OF REFERRAL REQTS OF Q8P2A SATISFIED/
241.          Q8P1A1B INF PROFESS. HRLY RATE/
242.          Q8P1A2B INF PROFESS. HRS PER MONTH/
243.          Q8P1B1B EDUCATIONAL PROF. HRLY RATE/
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                  Q8P1B2B EDUCATIONAL PROF. HRS PER MONTH/
                  Q8P1C1B OTHER PROFESSIONAL HRLY RATE/
                  Q8P1C2B OTHER PROFESSIONAL HRS PER MONTH/
                  Q8P1D1B TECH OR CLERICAL HRLY RATE/
                  Q8P1D2B TECH OR CLERICAL HRS PER MONTH/
                  Q8P1E1B STUDENT HRLY RATE/Q8P1E2B STUDENT HRS PER MONTH/
                  Q8P2B AVE # REQTS RECVD PER MONTH FOR REFERRALS/
                  Q8P3B % OF REFERRAL REQTS OF Q8P2B SATISFIED/
                  Q8P1A1C INF PROFESS. HRLY RATE/
                  Q8P1A2C INF PROFESS. HRS PER MONTH/
                  Q8P1B1C EDUCATIONAL PROF. HRLY RATE/
                  Q8P1B2C EDUCATIONAL PROF. HRS PER MONTH/
                  Q8P1C1C OTHER PROFESSIONAL HRLY RATE/
                  Q8P1C2C OTHER PROFESSIONAL HRS PER MONTH/
                  Q8P1D1C TECH OR CLERICAL HRLY RATE/
                  Q8P1D2C TECH OR CLERICAL HRS PER MONTH/
                  Q8P1E1C STUDENT HRLY RATE/Q8P1E2C STUDENT HRS PER MONTH/
                  Q8P2C AVE # REQTS RECVD PER MONTH FOR REFERRALS/
                  Q8P3C % OF REFERRAL REQTS OF Q8P2C SATISFIED/
                  Q8P1A1D INF PROFESS. HRLY RATE/
                  Q8P1A2D INF PROFESS. HRS PER MONTH/
                  Q8P1B1D EDUCATIONAL PROF. HRLY RATE/
                  Q8P1B2D EDUCATIONAL PROF. HRS PER MONTH/
                  Q8P1C1D OTHER PROFESSIONAL HRLY RATE/
                  Q8P1C2D OTHER PROFESSIONAL HRS PER MONTH/
                  Q8P1D1D TECH OR CLERICAL HRLY RATE/
                  Q8P1D2D TECH OR CLERICAL HRS PER MONTH/
                  Q8P1E1D STUDENT HRLY RATE/Q8P1E2D STUDENT HRS PER MONTH/
                  Q8P2D AVE # REQTS RECVD PER MONTH FOR REFERRALS/
                  Q8P3D % OF REFERRAL REQTS OF Q8P2D SATISFIED/
                  Q8P1A1E INF PROFESS. HRLY RATE/
                  Q8P1A2E INF PROFESS. HRS PER MONTH/
                  Q8P1B1E EDUCATIONAL PROF. HRLY RATE/
                  Q8P1B2E EDUCATIONAL PROF. HRS PER MONTH/
                  Q8P1C1E OTHER PROFESSIONAL HRLY RATE/
                  Q8P1C2E OTHER PROFESSIONAL HRS PER MONTH/
                  Q8P1D1E TECH OR CLERICAL HRLY RATE/
                  Q8P1D2E TECH OR CLERICAL HRS PER MONTH/
                  Q8P1E1E STUDENT HRLY RATE/Q8P1E2E STUDENT HRS PER MONTH/
                  Q8P2E AVE # REQTS RECVD PER MONTH FOR REFERRALS/
                  Q8P3E % OF REFERRAL REQTS OF Q8P2E SATISFIED/
                  Q9P1A1 AMT CONT ARRNGMNT SALE OR REPO ERIC DOC/
                  Q9P1A2 AMT IND PAY SALE OR REPO ERIC DOC/
                  Q9P1B1 AMT CONT ARRNGMNT SRCH ERIC DATABASE/
                  Q9P1B2 IND PAY SRCH ERIC DATABASES/
                  Q9P1C1 AMT CONT OTHER SRVC BASECD ON ERIC PROD/
                  Q9P1C2 IND PAY OTH SERVICE BASED ON ERIC PROD/
                  Q9P1D1 AMT CONT TOTAL/
                  Q9P1D2 TOTAL IND PAYMENT/
     VALUE LABELS Q1P3,Q1P5,Q4P1,Q4P3,Q4P10,Q4P15,Q6P2,Q6P8 (1)YES
                  (2)NO (7)NOT APP (8)DON'T KNOW (9)NO RESPONSE/

                  Q2P2A,Q2P2B,Q3P2A,Q4P5A,Q4P5B,Q6P1A,Q6P1B,
                  Q3P2B (01)JANUARY
                  (02)FEBRUARY (03)MARCH (04)APRIL (05)MAY (06)JUNE
                  (07)JULY (08)AUGUST (09)SEPTEMBER (10)OCTOBER
                  (11)NOVEMBER (12)DECEMBER (77)NOT APPL
                  (98)DONT KNOW (99)UNKNOWN/

                  Q4P1,Q4P2,Q4P3,Q4P10,Q4P15,Q6P2,Q6P8,
                  Q4P13,Q7P1A,Q7P1B,Q7P1C,Q7P1D (1)YES (2)NO
                  (3)DONT KNOW (7)NOT APPL (8)DONT KNOW (9)UNKNOWN/

                  Q1P6 (1) COLLEGE OR UNIV BUDGET (2)STATE FUNDS
                  (3)FED GRANTS OR CONTR (4)PRIVATE FUNDING
                  (5)DIR BILLING OR CHARGE (6)SCHOOL BUDGET
                  (7)OTH THAN SCH BUDG (8)OTHER (9)UNKNOWN/

                  Q2P4,Q3P4 (1)GREATER THAN (2)LESS THAN (3)ABOUT THE SAME
                  (4)DON'T KNOW (5)NOT APPLICABLE/

                  Q6P10A,Q6P10B,Q6P10C,Q6P10D (1)OWN STAFF
                  (2)OTHER DEPT STAFF (3) OTHER ORG STAFF (7)NOT APP
                  (8)DON'T KNOW (9)UNKNOWN/

                  Q1P2 (1)CEN CAMPUS FAC (2)DEPARTMENT FACILITY
                  (3)STATE ED AGENCY (4)LOC SCH LIB CENTER
                  (5)HEAD SCH LIB CENT (6)SCH DIST R&D CENT
                  (7)ERIC CLEARHOUSE (8)OTH FED SUPP CLEAR
                  (9)NIE-SUPP LAB OR CL (10)INTERM SERV PROV
                  (11)PUBLIC LIBRARY (12)SOC OR ORG
                  (13)BUSIN OR CORP (14)OTHER (98)DON'T KNOW (99)UNKNOWN
VALUE LABELS      Q2PO,Q3PO,Q4PO,Q5PO,Q6PO (1) NO (2)YES
VALUE LABELS      Q8POA,Q8POB,Q8POC,Q8POD,Q8POE (1)CHECKED BOX
                  (2)NOT CHECKED (7)NA
ALLOCATE          TRANSPACE=50000
IF                (Q2P1A GT 97 AND Q2P1B GT 97 AND Q2P2A GT 97 AND Q2P2B
                  GT 97 AND Q2P3 GT 9997 AND Q2P4 GT 4) RIESUB=2

IF                (Q2P1A EQ 0 AND Q2P1B EQ 0 AND Q2P2A GT 97 AND Q2P2B
                  GT 97 AND Q2P3 GT 9997 AND Q2P3 GT 3) RIESUB=2
IF                (Q2PO EQ 1) RIESUB =3
IF                (RIESUB NE 2 AND NE 3) RIESUB =1

IF                (Q3P1A GT 97 AND Q3P1B GT 97 AND Q3P2A GT 97 AND Q3P2B
                  GT 97 AND Q3P3 GT 9997 AND Q3P4 GT 4) CIJESUB=2
IF                (Q3P1A EQ 0 AND Q3P1B EQ 0 AND Q3P2A GT 97 AND Q3P2B GT
                  97 AND Q3P3 GT 9997 AND Q3P3 GT 3) CIJESUB=2
IF                (Q3PO EQ 1) CIJESUB =3
IF                (CIJESUB NE 2 AND NE 3) CIJESUB =1
VALUE LABELS      RIESUB (1)RIE SUBSCRIBER (2)NOT RIE SUBSCRIBER/
                  CIJESUB (1)CIJE SUBSCRIBER (2)NOT CIJE SUBS
VALUE LABELS      RIESUB (3) CHECKED BOX/CIJESUB (3)CHECKED BOX

VALUE LABELS      ID2 (1)CH & FACIL (2)RIE LIST (3)CIJE LIST
                       (4)SRCH LIST (5)FICHE LIST (6)DEP ACCT LIST
                       (7)EDRS ORDER LIST

IF                (Q4P1 EQ 1 OR Q4P2 EQ 1) ERICFICH =1
IF                (Q4P1 EQ 2 OR EQ 9) ERICFICH =2
IF                (Q4PO EQ 1) ERICFICH =3
VALUE LABELS      ERICFICH (1)HAS FICHE (2) NO FICHE (3)CHECK BOX

IF                (Q6P2 EQ 1 OR Q6P8 EQ 1 OR (Q6P3A GT 0 AND LT 7777 OR (
                  Q6P3B GT 0 AND LT 7777 OR (Q6P3C GT 0 AND LT 7777 OR
                  (Q6P9 GT 0 AND LT 7777))))) ERICSRCH =1
IF                (Q6PO EQ 1) ERICSRCH =3
IF                (ERICSRCH NE 1 AND NE 3) ERICSRCH =2
VALUE LABELS      ERICSRCH (1)HAS SEARCH (2)NO SEARCH (3)CHECK BOX

IF                (ID2 EQ 6 OR Q4P13 EQ 1) DEPOSIT =1
IF                  (DEPOSIT NE 1) DEPOSIT =2
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VALUE LABELS      DEPOSIT (1) HAVE DEPOSIT (2)NO DEPOSIT

IF                (ID2 EQ 7 OR (Q5P1A1 GT O AND LT 777777 OR
                      (Q5P1B1 GT O AND LT 777777))) EDRS =1
IF                (EDRS NE 1) EDRS =2
VALUE LABELS      EDRS (1)HAS EDRS (2)NO EDRS

IF              (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH NE 1
                AND ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS NE 1)GRP =1
IF              (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =2

IF              (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =3

IF              (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =4

IF              (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =5

IF              (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =6

IF              (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =7

IF              (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =8

IF              (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =9

IF               (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                  ERICFICH NE 1 AND DEPOSIT EQ 1 AND
                   EDRS NE 1) GRP = 10

IF              (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =11

IF              (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =12

IF              (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =13

IF              (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =14

IF              (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =15

IF              (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =16

IF              (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =17

IF              (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =18

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     IF               (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =19

     IF               (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =20

     IF               (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =21

     IF               (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =22

     IF               (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =23

     IF               (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =24

     IF               (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =25

     IF               (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =26

     IF               (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =27

     IF               (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =28

     IF               (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =29

     IF               (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =30

     IF               (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =31

     IF               (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =32

     IF               (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =33

     IF               (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =34

     IF               (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =35

     IF               (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =36

     IF               (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =37

     IF               (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =38

     IF               (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =39

          IF          (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =40

          IF          (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =41

          IF          (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =42

          IF          (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =43

          IF          (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =44

          IF          (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =45

          IF          (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =46

          IF          (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =47

          IF          (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =48

          IF          (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =49

          IF          (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =50

          IF          (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =51

          IF          (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =52

          IF          (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =53

          IF          (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =54

          IF          (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH NE 1 AND
                      ERICFICH NE 1 AND DEPOSIT NE 1 AND EDRS NE 1) GRP =55

          IF          (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =56

          IF          (RIESUB NE 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =57

          IF          (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS NE 1) GRP =58

          IF          (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
                      ERICFICH EQ 1 AND DEPOSIT NE 1 AND EDRS EQ 1) GRP =59
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    IF        (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
              ERICFICH NE 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =60

    IF        (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH NE 1 AND
              ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =61

    IF        (RIESUB EQ 1 AND CIJESUB NE 1 AND ERICSRCH EQ 1 AND
              ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =62

    IF        (RIESUB NE 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
              ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =63

    IF        (RIESUB EQ 1 AND CIJESUB EQ 1 AND ERICSRCH EQ 1 AND
              ERICFICH EQ 1 AND DEPOSIT EQ 1 AND EDRS EQ 1) GRP =64

    IF        (GRP EQ 1 OR 3 OR 4 OR 6 OR 55 AND ID2 EQ 2)
               WEIGHT1 = 21.7

    IF        (GRP EQ 2 OR 8 OR 20 AND ID2 EQ 3) WEIGHT1 = 11.0

    IF        (GRP EQ 3 OR 23 OR 30 OR 55 AND ID2 EQ 4)
               WEIGHT1 = 2.2

    IF        (GRP EQ 5 AND ID2 EQ 6) WEIGHT1 = 20.1

    IF        (GRP EQ 6 AND ID2 EQ 7) WEIGHT1 = 209.5

    IF        (GRP EQ 7 AND ID2 EQ 2 OR (GRP EQ 61 AND ID2 EQ 7))
               WEIGHT1 = 11.3

    IF        (GRP EQ 7 AND ID2 EQ 3) WEIGHT1 = 5.2

    IF        (GRP EQ 8 AND ID2 EQ 2) WEIGHT1 = 10.9

    IF        (GRP EQ 8 AND ID2 EQ 4) WEIGHT1 = 1.1

    IF        (GRP EQ 9 AND ID2 EQ 2) WEIGHT1 = 13.3

    IF        (GRP EQ 9 AND ID2 EQ 5 OR (GRP EQ 59 OR 64 AND ID2 EQ 3))
               WEIGHT1 = 2.7

    IF        (GRP EQ 10 OR 22 AND ID2 EQ 5 OR (GRP EQ 44 AND
               ID2 EQ 2))
               WEIGHT1 = 7.1

    IF        (GRP EQ 11 AND ID2 EQ 2) WEIGHT1 = 18.9

    IF        (GRP EQ 11 AND ID2 EQ 7) WEIGHT1 = 27.5

    IF        (GRP EQ 13 AND ID2 EQ 5) WEIGHT1 = 2.9

    IF        (GRP EQ 14 AND ID2 EQ 6 OR (GRP EQ 18 AND ID2 EQ 4))
               WEIGHT1 = 1.9

    IF        (GRP EQ 15 AND ID2 EQ 3) WEIGHT1 = 9.4

    IF        (GRP EQ 18 AND ID2 EQ 7) WEIGHT1 = 28.0

    IF        (GRP EQ 22 AND ID2 EQ 2) WEIGHT1 = 7.5

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IF          (GRP EQ 22 AND ID2 EQ 3) WEIGHT1 = 3.5

IF          (GRP EQ 22 OR 44 AND ID2 EQ 4 OR (GRP EQ 45 AND
             ID2 EQ 6))
             WEIGHT1 = 0.7

IF          (GRP EQ 23 AND ID2 EQ 2) WEIGHT1 = 8.5

IF          (GRP EQ 23 AND ID2 EQ 3) WEIGHT1 = 3.9

IF          (GRP EQ 23 AND ID2 EQ 5) WEIGHT1 = 1.8

IF          (GRP EQ 25 AND ID2 EQ 2) WEIGHT1 = 10.5

IF          (GRP EQ 25 AND ID2 EQ 3) WEIGHT1 = 4.9

IF          (GRP EQ 25 AND ID2 EQ 7) WEIGHT1 = 15.3

IF          (GRP EQ 26 AND ID2 EQ 2) WEIGHT1 = 8.3

IF          (GRP EQ 26 OR 49 OR 62 AND ID2 EQ 4) WEIGHT1 = 0.8

IF          (GRP EQ 26 OR 45 OR 46 AND ID2 EQ 5) WEIGHT1 = 1.7

IF          (GRP EQ 27 AND ID2 EQ 6) WEIGHT1 = 0.9

IF          (GRP EQ 28 AND ID2 EQ 2) WEIGHT1 = 10.2

IF          (GRP EQ 28 AND ID2 EQ 4 OR (ID2 EQ 1)) WEIGHT1 = 1.0

IF          (GRP EQ 28 AND ID2 EQ 7) WEIGHT1 = 14.8

IF          (GRP EQ 29 AND ID2 EQ 2) WEIGHT1 = 12.6

IF          (GRP EQ 29 AND ID2 EQ 5) WEIGHT1 = 2.6

IF          (GRP EQ 30 AND ID2 EQ 2) WEIGHT1 = 12.2

IF          (GRP EQ 30 OR 39 AND ID2 EQ 5) WEIGHT1 = 2.5

IF          (GRP EQ 30 AND ID2 EQ 7) WEIGHT1 = 17.7

IF          (GRP EQ 40 AND ID2 EQ 6) WEIGHT1 = 1.5

IF          (GRP EQ 42 AND ID2 EQ 2) WEIGHT1 = 6.2

IF          (GRP EQ 42 OR 58 AND ID2 EQ 3) WEIGHT1 = 2.8

IF          (GRP EQ 42 OR 58 OR 59 OR 64 AND ID2 EQ 4 OR (GRP EQ
             60 AND ID2 EQ 6))
             WEIGHT1 = 0.6

IF          (GRP EQ 42 AND ID2 EQ 5) WEIGHT1 = 1.3

IF          (GRP EQ 44 AND ID2 EQ 3) WEIGHT1 = 3.3

IF          (GRP EQ 44 AND ID2 EQ 7) WEIGHT1 = 10.4

IF          (GRP EQ 45 AND ID2 EQ 2) WEIGHT1 = 8.2

IF          (GRP EQ 45 AND ID2 EQ 3) WEIGHT1 = 3.8
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//  JOB (M516,9309),LEVITZ,CLASS=Q
/*NOSETUP
//*COMMENT    REQUEST FOR TABLES USING ERICOMP3 #ERICMORE
//PROCLIB DD DSN=CCIAPP.PROCLIB,DISP=SHR
//  EXEC SPSS
//FT03F001 DD UNIT=3350,DSN=WYL.H2KRI1.ERICOMP3,DISP=(OLD),
//  VOL=SER=TS01
//SYSIN DD *
NUMBERED          YES
RUN NAME          ERIC TABLES #25A TO #25D
GET FILE          ERICOMP3
ALLOCATE          TRANSPACE=30000

IF                (ID1 EQ 11010 OR 11020 OR 11030 OR 12020 OR 12030 OR
                   13010 OR 13030 OR 13040 OR 14010 OR 14020 OR 14030
                   OR 14040 OR 15010 OR 15020 OR 15030 OR 15040)
                  NEWTYPE1 = 1

IF                (ID1 EQ 12010) NEWTYPE1 = 2

IF                (Q1P2 EQ 1 OR (ID1 EQ 31230 OR 31330 OR 43290 OR
                   55140))
                  NEWTYPE1 = 3

IF                (Q1P2 EQ 2 OR (ID1 EQ 22420 OR 44080)) NEWTYPE1 = 4

IF                (ID1 EQ 24211 OR 24440 OR 41140 OR 42130 OR 42240 OR
                   44201 OR 44420 OR 25450)
                  NEWTYPE1 = 5

IF                (Q1P2 EQ 3 OR (ID1 EQ 21140 OR 42350)) NEWTYPE1 = 6

IF                (ID1 EQ 33140 OR 51200 OR 64060) NEWTYPE1 = 7

IF                (ID1 EQ 21160 OR 22180 OR 23160 OR 43160 OR 52090 OR
                   54110 OR 62040 OR 42140)
                  NEWTYPE1 = 8

IF                (Q1P2 EQ 8) NEWTYPE1 = 9

IF                (Q1P2 EQ 9) NEWTYPE1 = 10

IF                (Q1P2 EQ 10 OR (ID1 EQ 44110)) NEWTYPE1 = 11

IF                (Q1P2 EQ 6) NEWTYPE1 = 12

IF                (Q1P2 EQ 5) NEWTYPE1 = 13

IF                (Q1P2 EQ 4) NEWTYPE1 = 14

IF                (Q1P2 EQ 11 OR (ID1 EQ 34290)) NEWTYPE1 = 15

IF                (Q1P2 EQ 12 OR (ID1 EQ 24200 OR 21240)) NEWTYPE1 = 16

IF                (Q1P2 EQ 13 OR (ID1 EQ 72040)) NEWTYPE1 = 17

IF                (Q1P2 EQ 14 AND ID1 EQ 21330 OR 22200 OR 23320 OR
                   24070 OR 24350 OR 25140 OR 25240 OR 25440 OR 31500
                   OR 34200 OR 34260 OR 35180 OR 41080 OR 42160 OR
                   42440 OR 43010 OR 44280 OR 45360 OR 45400 OR 61080
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IF              (GRP EQ 46 AND ID2 EQ 2) WEIGHT1 = 8.0

IF              (GRP EQ 46 AND ID2 EQ 3) WEIGHT1 = 3.7

IF              (GRP EQ 49 AND ID2 EQ 7) WEIGHT1 = 11.5

IF              (GRP EQ 58 AND ID2 EQ 2) WEIGHT1 = 6.0

IF              (GRP EQ 58 OR 59 OR 64 AND ID2 EQ 5) WEIGHT1 = 1.2

IF              (GRP EQ 58 OR 64 AND ID2 EQ 6) WEIGHT1 = 0.5

IF              (GRP EQ 59 AND ID2 EQ 2) WEIGHT1 = 5.9

IF              (GRP EQ 59 AND ID2 EQ 7) WEIGHT1 = 8.6

IF              (GRP EQ 61 AND ID2 EQ 2) WEIGHT1 = 7.8

IF              (GRP EQ 61 AND ID2 EQ 3) WEIGHT1 = 3.6

IF              (GRP EQ 61 AND ID2 EQ 5) WEIGHT1 = 1.6

IF              (GRP EQ 64 AND ID2 EQ 2) WEIGHT1 = 5.8

VAR LABELS      RIESUB SUBSCRIBES TO RESOURCES IN EDUCATION-RIE/
                CIJESUB SUBS TO CURRENT INDEX TO JOURNALS IN ED-CIJE/
                ERICSRCH CONDUCTS ERIC DATA BASE SEARCHES/
                ERICFICH HAS ERIC MICROFICHE/
                DEPOSIT HAS EDRS DEPOSIT ACCOUNTS/
                EDRS ORDERS DOCUMENTS FROM EDRS/
                Q8POA RIE/
                Q8POB CIJE/
                Q8POC DOCS/
                Q8POD SRCH/
                Q8POE CLHSE & FACIL/

READ INPUT DATA

FREQUENCIES     GENERAL=ALL

SAVE FILE       ERICCOMP
FINISH
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                 OR 63030 OR 73080)
                NEWTYPE1 = 18

VALUE LABELS    NEWTYPE1 (1) ERIC CLRHSES (2) ERIC FACILITY
                 (3) CAMPUS MAIN LIB (4) CAMPUS DEPT LIB
                 (5) CAMPUS OTH ORG (6) STATE ED AGCY (7) STATE LIB
                 (8) FEDERAL LIB (9) OTHER FED CHSE (10) NIE LAB OR CTR
                 (11) INTERM SRVC PROV (12) SCH DIST R&D CTR
                 (13) SCH LIB DISTRICT (14) SCH LIB LOCAL
                 (15) PUBLIC LIBRARY (16) SOCIETY OR ASSOC
                 (17) BUSINESS OR CORP (18) OTHER

IF              (NEWTYPE1 EQ 1 OR 2) NEWTYPE2 = 1

IF              (NEWTYPE1 EQ 3 OR 4 OR 5) NEWTYPE2 = 2

IF              (NEWTYPE1 EQ 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13
                 OR 14 OR 15 OR 16 OR 17 OR 18)
                NEWTYPE2 = 3

VALUE LABELS    NEWTYPE2 (1) ERIC CLHSE & FAC (2) ACADEMIC ACC PTS
                 (3) OTHER ACC PTS

VAR LABELS      NEWTYPE1 TYPE OF ORGANIZATION-LONG/
                NEWTYPE2 TYPE OF ORGANIZATION-SHORT

IF              (ERICFICH EQ 1 OR (Q4P15 EQ 1)) ERICDOC = 1

IF              (ERICFICH NE 1 AND (Q4P15 NE 1)) ERICDOC = 2

VALUE LABELS    ERICDOC (1) HAS ERIC DOCS (2) NO ERIC DOCS

VAR LABELS      ERICDOC HAS ERIC MICROFICHE OR PAPER COPY/
                RIESUB SUBSCRIBES TO RESOURCES IN EDUCATION-RIE/
                CIJESUB SUBS TO CURRENT INDEX TO JOURNALS IN ED-CIJE/
                ERICSRCH CONDUCTS ERIC DATA BASE SEARCHES/
                ERICFICH HAS ERIC MICROFICHE/
                DEPOSIT HAS EDRS DEPOSIT ACCOUNTS/
                EDRS ORDERS DOCUMENTS FROM EDRS

IF              (RIESUB EQ 1 AND (CIJESUB NE 1 AND (ERICSRCH NE 1 AND
                 (ERICDOC NE 1))))
                OVERLAP=1

IF              (RIESUB NE 1 AND (CIJESUB EQ 1 AND (ERICSRCH NE 1 AND
                 (ERICDOC NE 1))))
                OVERLAP=2

IF              (RIESUB NE 1 AND (CIJESUB NE 1 AND (ERICSRCH EQ 1 AND
                 (ERICDOC NE 1))))
                OVERLAP=3

IF              (RIESUB NE 1 AND (CIJESUB NE 1 AND (ERICSRCH NE 1 AND
                 (ERICDOC EQ 1))))
                OVERLAP=4

IF              (RIESUB EQ 1 AND (CIJESUB EQ 1 AND (ERICSRCH NE 1 AND
                 (ERICDOC NE 1))))
                OVERLAP=5

IF              (RIESUB EQ 1 AND (CIJESUB NE 1 AND (ERICSRCH EQ 1 AND
                   (ERICDOC NE 1))))
                  OVERLAP=6

IF                (RIESUB NE 1 AND (CIJESUB NE 1 AND (ERICSRCH EQ 1 AND
                   (ERICDOC EQ 1))))
                  OVERLAP=7

IF                (RIESUB NE 1 AND (CIJESUB EQ 1 AND (ERICSRCH NE 1 AND
                   (ERICDOC EQ 1))))
                  OVERLAP=8

IF                (RIESUB EQ 1 AND (CIJESUB EQ 1 AND (ERICSRCH EQ 1 AND
                   (ERICDOC NE 1))))
                  OVERLAP=9

IF                (RIESUB EQ 1 AND (CIJESUB NE 1 AND (ERICSRCH EQ 1 AND
                   (ERICDOC EQ 1))))
                  OVERLAP=10

IF                (RIESUB NE 1 AND (CIJESUB EQ 1 AND (ERICSRCH EQ 1 AND
                   (ERICDOC EQ 1))))
                  OVERLAP=11

IF                (RIESUB EQ 1 AND (CIJESUB EQ 1 AND (ERICSRCH NE 1 AND
                   (ERICDOC EQ 1))))
                  OVERLAP=12

IF                (RIESUB EQ 1 AND (CIJESUB EQ 1 AND (ERICSRCH EQ 1 AND
                   (ERICDOC EQ 1))))
                  OVERLAP=13

IF                (RIESUB EQ 1 AND (CIJESUB NE 1 AND (ERICSRCH NE 1 AND
                   (ERICDOC EQ 1))))
                  OVERLAP=14

IF                (RIESUB NE 1 AND (CIJESUB EQ 1 AND (ERICSRCH EQ 1 AND
                   (ERICDOC NE 1))))
                  OVERLAP=15

VALUE LABELS      OVERLAP (1)ONLY RIESUB (2)ONLY CIJESUB (3)ONLY ERICSRCH
                   (4)ONLY ERICDOC (5)RIE AND CIJE (6)RIE AND ERICSRCH
                   (7)SRCH AND ERICDOC (8)CIJE AND ERICDOC (9)RIE-CIJE-
                    SRCH (10)RIE-SRCH-ERICDOC (11)CIJE-SRCH-DOC (12)RIE-
                    CIJE-DOC (13)RIE-CIJE-SRCH-DOC
                   (14)RIESUB-ERICDOC (15)CIJESUB-ERICSRCH

VAR LABELS        OVERLAP ERIC ACCESS POINT OVERLAP PDTS AND SVCS

IF                (ERICSRCH EQ 1) ERICSCH2=1

IF                (ERICSRCH EQ 2 OR 3) ERICSCH2=2

VALUE LABELS      ERICSCH2 (1)ERIC SRCHES (2)NO ERIC SRCHES

IF                (OVERLAP EQ 1 OR 2 OR 3 OR 4)
                   OVERLAP2=1

IF                (OVERLAP EQ 5 OR 6 OR 7 OR 8 OR 14)
                   OVERLAP2=2

IF                (OVERLAP EQ 9 OR 10 OR 11 OR 12)
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                            OVERLAP2=3

        IF                 (OVERLAP EQ 13)
                            OVERLAP2=4

        VALUE LABELS       OVERLAP2 (1)ONLY ONE (2)ONLY TWO (3)ONLY THREE
                                    (4)ALL FOUR

        IF                 (Q6P2 EQ 1 OR (Q6P3A GT 0 AND LT 7777 OR
                            (Q6P3B GT 0 AND LT 7777 OR (Q6P3C GT 0 AND LT
                             7777))))
                           ONLINE=1

        IF                 (Q6P0 EQ 1) ONLINE=2

        IF                 (RIESUB EQ 1 OR (CIJESUB EQ 1 OR (ERICDOC EQ 1 OR
                            (ERICSRCH EQ 1 OR (ERICFICH EQ 1 OR (ONLINE EQ 1))))))
                           ACCPT=1

        IF                 (ACCPT NE 1) ACCPT=2

        IF                 (Q4P6A LT 77777760 AND Q4P6B LT 77777776)
                            MONFICHE=Q4P6B

        IF                 (Q4P6A LT 77777760 AND Q4P6B GE 77777776)
                            MONFICHE=(Q4P6A/1.6)

        IF                 (Q4P6A GE 77777760 AND Q4P6B LT 77777776)
                            MONFICHE=Q4P6B

        IF                 (Q4P6A GE 77777760 AND Q4P6B GE 77777776)
                            MONFICHE=77777777
        ASSIGN MISSING     MONFICHE (77777777)
        VAR LABELS         MONFICHE # TIMES PER MO. FICHE TITLES RETRIVED/

        IF                 (Q6P2 EQ 1 OR (Q6P3A GT 0 AND LT 7777 OR
                            (Q6P3B GT 0 AND LT 7777 OR (Q6P3C GT 0 AND LT
                             7777))))
                           ONLINE=1

        IF                 (Q6P0 EQ 1) ONLINE=2

        IF                 (Q4P6A LT 77777760 AND Q4P6B LT 77777776)
                            NEWFICHE=Q4P6B*12

        IF                 (Q4P6A LT 77777760 AND Q4P6B GE 77777776)
                            NEWFICHE=(Q4P6A/1.6)*12

        IF                 (Q4P6A GE 77777760 AND Q4P6B LT 77777776)
                            NEWFICHE=Q4P6B*12

        IF                 (Q4P6A GE 77777760 AND Q4P6B GE 77777776)
                            NEWFICHE=77777777

        COMPUTE            SRCHTRAN=((Q6P7/100)*Q6P6)
        VAR LABELS         SRCHTRAN # MONTHLY REQ FOR ERIC FORWARDED TO OTH ORGS/

        COMPUTE            TOTSRCHS=((Q6P6+Q6P3C+Q6P9)*12)
        VAR LABELS         TOTSRCHS ANNUALIZED SEARCHES/

        WEIGHT             WEIGHT1
```

APPENDIX C
ACCESS POINT PRIMARY SURVEY
DESCRIPTION OF METHODS

C.1 Description of Survey

The final question in the Access Point Screener Survey was a request for access point participation in the Access Point Primary Survey. Access Points were asked to volunteer to collect the names and addresses of ERIC Requestors using the Request Card, a sample of which was included as part of the Screener questionnaire.

Altogether, 249 access points agreed to participate in the Primary Survey. The ERIC Clearinghouses and the ERIC Facility were asked to monitor RIE, CIJE, ERIC searching, and ERIC documents. Remaining access points were asked to monitor one of these categories, depending upon the sample list from which the access point was drawn for the Screener Survey.

Access points which volunteered to participate in the Primary Survey were assigned 10, 20, or 30 Request Cards to be filled out over a period of up to four weeks. These initial assignments were made based on the monthly demand reported in the Screener Survey, as follows:

ERIC Category	Number of Request Cards Assigned	Monthly Requests Reported in Access Point Screener Survey
RIE,	10	10 or fewer
CIJE, and	20	11-20
Searching	30	more than 20
ERIC Documents	10	200 or more
	20	201-300
	30	more than 300

All the access points which agreed to participate in the Primary Survey were mailed survey packages containing the following:

- 10, 20, or 30 Request Cards
- An instruction manual
- Forms for transmitting Request Cards to King Research on a weekly basis
- Post-paid return envelopes

Altogether, 6,350 Request Cards were distributed. Each Card was individually numbered with a unique ten-digit serial number encoding (a) the type of product or service to be monitored, (b) the identification number of the access point (carried over from the Screener Survey), (c) a unique serial number identifying the Request Card, and (d) the organization type (e.g., ERIC Clearinghouse, academic library, etc.) of the access point, also carried over from the Screener Survey.

Of the 249 access points which agreed to participate in the Primary Survey, responses were received from 168, or 67 percent. Of the 6,350 Request Cards distributed, a total of 2,628 were returned. Table C.1 illustrates the returns on this survey. Reasons for disagreement to participate in the Primary Survey included (a) too busy to participate, and/or (b) not enough ERIC use to justify participation.

C.2 Survey Management

Request Cards were distributed to participating access points beginning in January 1981, and responses were received as follows: January (0.1%), February (0.2%), March (63.6%), April (34.1%), May (1.3%), No Date Given (0.8%). Thus, responses to the survey must be viewed as representative of ERIC requests occurring during Spring. According to data on seasonal variation supplied by ERIC access points, the data collection period occurred neither at the high point nor at the low point of ERIC usage.

Table C.1 Participation in the Access Point Screener Survey by ERIC Category

ERIC Category	Number of Access Points which Agreed to Participate	Number of Access Points which Actually Participated	Number of Request Cards Distributed	Number of Request Cards Received
RIE	61	27	1,210	332
CIJE	57	26	1,280	280
Searching	113	70	2,450	1,216
Documents	69	47	1,410	800
Total	300[1]	170[1]	6,350	2,628

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Primary Survey, 1981.

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[1] The access points in ERIC Clearinghouses & Facility category (n=17) were asked to monitor ERIC products and services in all four categories; thus, they appear in each row of these two columns.

In terms of the coverage of all ERIC requests occurring during the data collection period, many of the access points which participated reported that their "take" of Request Cards underreported their actual ERIC demand during the data collection period, either because staff were not available during all service hours or because the ERIC product being monitored was out of sight of the reference desk or other monitoring point. Because of this underreporting, the Primary Survey Request Cards were not analyzed by themselves but instead were used, for each sampling group of access points, to subdivide the monthly requests reported in the Screener Survey into "assisted", "unassisted", and "staff use" categories. (Details on calculations contributing to estimating total annual usage by these types of use are given in Appendix G.)

Not all the Request Cards returned were "useable" for the purpose of developing the Requestor Population Survey sample. Approximately 30 percent were returned without either the topic or title of the request or without the name and address of the requestor. Despite this, nearly all of the access points which supplied Request Cards were covered in the Requestor Population Survey mailout.

C.3 The Instruction Manual

A copy of the instruction manual sent to the participating Primary Survey access points is displayed on the following pages.

King Research, Inc.
P. O. Box 71
Rockville, Md. 20850
(301) 881-6766

ERIC COST AND USAGE STUDY
ACCESS POINT PRIMARY SURVEY
INSTRUCTION MANUAL

A. These instructions are for:

(Note: Your "ID Number" is in the upper, right-hand corner of the label.)

B. You are monitoring the following:

1. Resources in Education (RIE)
2. Current Index to Journals in Education (CIJE)
3. Computer searching of the ERIC Data Base
4. ERIC Documents

C. Your assignment is as follows:

1. Begin filling out the Request Cards two working days after you receive these instructions.

2. ________ is the total number of Request Cards which you should fill out.

3. Continue filling out the Request Cards until your supply is used up or until four weeks have passed from your start date, whichever comes first.

4. Each week return a Transmittal Log with the Request Cards collected during that week. Return the Final Transmittal Log when you return your final shipment of Request Cards.

ERIC COST AND USAGE STUDY
ACCESS POINT PRIMARY SURVEY
INSTRUCTION MANUAL

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1. Purpose and Description of the Study

During the course of data collection, you will receive requests for information about the overall study. Users will also be interested in why information is being collected on their own particular uses. One side of the Request Card contains a description of the survey for which you are collecting data. Cards are reproduced on the next two pages.

PLEASE PRINT

ERIC COST and USAGE STUDY
– ERIC REQUEST CARD –

USE BLACK INK

This is a voluntary survey being conducted under contract to the National Institute of Education (NIE) by King Research, Inc., P.O. Box 71, Rockville, Maryland 20850, (301) 881-6766.

MONTH ☐☐ DAY ☐☐ I.D. NUMBER ☐

NAME OF REQUESTOR:

MAILING ADDRESS INCLUDING ZIP CODE: ____________________

TELEPHONE NUMBER (_____) ____________________
Area Code NUMBER

TITLE OR TOPIC OF REQUEST:

Please insert the number of ERIC documents (microfiche or paper-copy) used, if applicable: _____

1. TYPE OF PRODUCT OR SERVICE INVOLVED (Circle all applicable codes)

ERIC's RIE	01
ERIC's CIJE	02
ERIC Online Search	03
ERIC Batch Search	04
ERIC Microfiche	05
ERIC Printed Report	06
ERIC Printed Bibliography	07
Other Printed Indexes	08
Other Computer Databases	09
Other Documents	10
Other (Describe) ____________________	11

2. WAS THE ERIC THESAURUS USED? (Circle 1, 2, or 3)

Yes	1
No	2
Don't Know	3

3. WAS REQUESTOR ASSISTED BY STAFF? (Circle 1, 2, or 3)

Yes	1
No	2
Requestor was a Staff Member	3

4. HOW WAS REQUEST RECEIVED? (Circle 1, 2, 3, or 4)

In Person	1
Telephone	2
Mail	3
Other (Describe) ____________________	4

5. HOW WAS RESPONSE DELIVERED? (Circle all applicable codes)

In Person	1
Telephone	2
Mail	3
Other (Describe) ____________________	4

DESCRIPTION OF THE ERIC COST AND USAGE STUDY

This study is being conducted by King Research, Inc., under contract to the U.S. Department of Education's National Institute of Education (NIE). It is a study of the usage of ERIC (Educational Resources Information Center) and of the costs associated with ERIC products and services. ERIC is a national system which is responsible for the following information products and services:

1. Resources in Education (RIE), a monthly journal which abstracts and indexes the educational report literature.

2. Current Index to Journals in Education (CIJE), a monthly journal which covers the educational periodical literature.

3. ERIC documents in both microfiche and papercopy.

4. The ERIC bibliographic database, which is accessible for computer searching through a variety of services.

As part of this study, King Research, a private research firm, has contacted a sample of organizations which provide one or more of the above ERIC products or services. A major part of the study involves collecting data from individual users of an ERIC product or service from one of the four categories listed above. The names and addresses of users are being collected using the Request Cards printed on the reverse side of this form. A sample of these users of ERIC will then be contacted within the next several weeks by mail using a self-administered questionnaire designed to follow up on the use of a specific ERIC product or service. Individual names and addresses will not be reported. All data will be reported in aggregated form so that individual identities cannot be determined. The list of individuals' names and addresses will be destroyed following completion of the survey.

The data from these and other survey activities will be combined to develop the first comprehensive statistical picture of the ERIC system in nearly a decade. NIE will use the data for planning, policy development, and research purposes. The most important questions we hope this study will answer are (1) how is access to ERIC provided throughout the United States, (2) who uses ERIC and how, and (3) how much does this usage cost?

Naturally, all cooperation in this survey is voluntary. We believe that a high degree of cooperation will ultimately lead to improvements in educational dissemination as a whole as well as a better understanding of the costs and benefits of the ERIC system in particular.

If you have any questions on the conduct of the survey, please contact:

Colleen Schell
Survey Director
King Research, Inc.
P.O. Box 71
Rockville, Maryland 20852
(301) 881-6766

2. How to Fill Out Request Cards

Sets of ERIC Request Cards are included in this data collection package. One side of the Request Card contains a description of the survey. The other side of the card contains a space for inserting the name and mailing address of the ERIC requestor, the nature of the request and five precoded questions which you will answer by circling the appropriate code.

Detailed instructions on how to fill out the request card are as follows:

A. Month, Day and ID. Your organization's ID code will already be stamped on the Request Card and is needed for our recordkeeping purposes. (The ID# identifies your organization.) The month and day will be filled in by you indicating the date of the request. Month and day information is necessary so that estimates of daily or weekly usage can be compared with estimates of monthly usage obtained in the Screener Survey which was conducted earlier.

Use the following codes for Month:

January	01	July	07
February	02	August	08
March	03	September	09
April	04	October	10
May	05	November	11
June	06	December	12

Use the following codes for Day:

01
02
03
04...etc.
through
31

B. Name of Requestor, Mailing Address Including Zip Code, and Telephone Number. The name and current mailing address of the requestor will be filled in by you. By current, we mean a mailing address where the requestor can be reached over the next eight weeks. In nearly all instances, the mailing address should be the requestor's current residence.

Also, you will need to ask the requestor for his/her current telephone number -- a number where the requestor can be reached over the next eight weeks.

The name, mailing address and telephone number are being requested so that a sample of ERIC users can be surveyed about their use of and satisfaction with the ERIC product being used during this data collection period. Once the survey analysis is completed, all records of names and addresses will be destroyed.

C. Title or Topic of the Request. In this space, we are asking you to briefly describe why the requestor is requesting or using the particular ERIC product. This description can be specific or general, depending on the requestor's response. For example, if the requestor initially asks for a specific document, the document title will be written in this space. If the requestor has a topical or subject request, a brief description of the request topic will be recorded.

The title or topic of the request will be used in the survey of ERIC requestors. The Request Card itself will be copied onto the questionnaire which we mail to the requestor in order to remind him or her of the nature of the request.

Examples of the topic or title of the request are:

Topics:
1. Classroom observation techniques
2. Pass fail grading

Titles:
1. Assessing Bilingual Instructional Practices and Outcomes: A Precision Approach to an Old Dilemma
2. Identifying Future Research and Training Programs for University-Based Secondary Education Departments

Please note: if you are monitoring requests for ERIC documents (microfiche or papercopy), please insert the number of documents (report titles on microfiche or papercopy), if applicable.

Question 1. Type of product or service involved. Circle the number(s) next to the product or service being used or requested by the requestor. CIRCLE AS MANY NUMBERS AS APPLY. Remember one of the circled numbers must be the ERIC product or service which you have been assigned to monitor.

Definitions of the categories in Q.1 are:

01.	ERIC's RIE	Resources in Education, a monthly journal which abstracts and indexes the educational report literature.
02.	ERIC's CIJE	Current Index to Journals in Education, a monthly journal which covers the educational periodical literature.
03.	ERIC's Online Searching	Computerized searching of the ERIC bibliographic database, usually conducted through use of a terminal interacting via telephone lines with a host computer.
04.	ERIC's Batch Searching	Computerized searching of the ERIC bibliographic database, usually conducted by grouping several requests together for submission at one time to a host computer.
05.	ERIC's Microfiche	Pages photographically reduced to fit on an index-card sized piece of film, requiring use of a magnifying device to read.
06.	ERIC's Printed Report	Any report produced or supplied by ERIC, usually with an "ED" identifying number, which is printed on paper.
07.	ERIC's Printed Bibliography	Any list of bibliographic references (other than computer printout) which is produced and distributed on paper by ERIC or any of its 16 Clearinghouses.
08.	Other Printed Indexes	Any printed indexing or abstracting publication other than RIE or CIJE, for example Psychological Abstracts, Education Index, Reader's guide, etc.
09.	Other Computer Databases	Computerized searching of databases other than ERIC.
10.	Other Documents	Microfiche or documents not produced or supplied by ERIC.
11.	Other (describe)	Any other product or service not included above.

The data generated by sorting and tabulating cards by these categories will be compared with estimates obtained in the Screener Survey. Estimates of usage will be made for each of the four product or service categories.

Question 2. Was the ERIC Thesaurus used? Circle "1" if the ERIC Thesaurus was used either by the requestor or by your staff in connection with this request.

We intend to use this question to help estimate the proportion of ERIC use which also involves use of a printed copy of the Thesaurus of ERIC Descriptors.

Question 3. Was Requestor Assisted by Staff? Circle the number next to the category which is appropriate to the request. Circle one number only.

If your staff assisted the requestor, circle "1".
If your staff did not assist the requestor, circle "2".
If the requestor was a staff member, circle "3".

This information is needed to provide help to estimate unassisted uses of ERIC.

Question 4. How was request received? Circle the number next to the actual method by which the request was received. Circle one number only.

If the request was received in person, circle "1".
If the request was received by telephone, circle "2".
If the request was received by mail, circle "3".

If you circle 4 "other", please describe briefly what the other method is in the space provided.

Analysis of this question will provide basic information on how physical access to ERIC is initiated.

Question 5. How was response delivered? The instructions for Question 5 correspond to those in Question 4. In many cases the response will be identical. Examples of cases where it may differ are when requests are received by telephone, and then responded to by mail.

In summary, the few data items on the request card will allow us to generate descriptions of the general characteristics of ERIC requests. In the weeks following, a sample of requestors will be contacted to measure their use of and satisfaction with the ERIC product or service.

3. How to Keep Track of or "Tally" Requests

We would like to have a Request Card completed each time your assigned ERIC product or service is requested or used during the data collection period. We realize this may not be possible if many people are using your assigned ERIC product/service during the same time period. However, the closer the number of Request Cards comes to the total actual uses, the more accurate, and therefore useful, the analysis will be.

4. What Counts as a Request?

A request occurs any time an individual, assisted or unassisted by your staff, asks to use or uses the assigned ERIC product or service you are monitoring. Any requests initiated by telephone or mail requests or inquiries of this ERIC product/service should also be considered. Each separate request needs a Request Card completed. For example, the same requestor may use the same ERIC product/service ten times during the data collection period. This would count as ten requests.

5. When Should a Request Card be Filled Out?

A Request Card should be filled out whenever an individual requests or uses the ERIC product or service which your organization has been assigned to monitor.

The following guidelines will help you in deciding when to fill out a Request Card: A Request Card should be filled out when you observe someone using your assigned ERIC product or service. The Request Card should be filled out only if the ERIC product or service you are monitoring is actually requested or used. The Request Card should also be filled out each time your assigned product or service is used by a staff member.

In other words, we would like you to fill out a Request Card each time an individual (including a member of your staff) obtains, reads, copies, or otherwise uses the ERIC product or service assigned to your organization to monitor. These Request Cards reflect requests or usage of your assigned ERIC product or service for:

1. Assisted usage (your staff helps the potential ERIC user with the product or service). Requests are "assisted" when both the requestor and a staff member are involved in using the ERIC product or service to help answer the requestor's question. Examples of staff-assisted requests are the following:

   - A librarian helps a teacher search for relevant ERIC documents using RIE by helping the teacher identify relevant ERIC descriptors.

   - A student assistant retrieves an ERIC microfiche from a "closed" ERIC microfiche collection in response to another student's microfiche request.

   - A librarian performs an online computer search of the ERIC bibliographic database for a student teacher.

2. Unassisted usage (the potential ERIC user is familiar with the ERIC product or service and helps (him/her) self to the information). Requests are "unassisted" when the requestor uses the ERIC product or service without the help of a staff member. Examples of such instances are the following:

   - A student retrieves a fiche from an "open" collection for his own use.

   - A professor does her own online searching of the ERIC database.

   - A teacher examines CIJE on his own to identify relevant journal articles.

You will run into some situations which require you to make judgements about the requestor and the use of the ERIC product or service. Two specific instances may arise which will require special considerations when you are determining if a request is staff-assisted or not.

The first is a "directional" request. That is, an individual may ask you a directional question such as "where are your copies of RIE?" Is this a staff-assisted request? Generally, no; "directional" and related types of requests should be excluded from the "staff-assisted" category since these do not involve you in the actual use of the ERIC product or service which you have been asked to monitor.

The second instance may arise when you approach a requestor to fill out the data in the Request Card. What if a requestor, after you have asked him for his name and address, asks you to help him? Should you then classify this as a "staff-assisted" request? It depends. If you end up actually helping the person use CIJE and you have been assigned to monitor CIJE, you should certainly classify this as a staff-assisted request. If, on the other hand, the individual asks you to help him or her obtain or use some information product or service other than the one you have been asked to monitor, then you should not classify this as a staff-assisted request.

On the following page we have outlined some unusual situations and described what you should do if you encounter any of the outlined situations. These situations are only examples. If you encounter any situation about which you are undecided, please call Colleen Schell, collect, at (301) 881-6766 for guidance.

EXAMPLES OF "PROBLEM" SITUATIONS

IF....	THEN....
....the requestor uses several different types of ERIC products or services, in addition to the one assigned to your organization.	....circle all the appropriate code numbers under the "Type of Product/Service Involved" question.
....the requestor comes back several days in a row and balks at being surveyed again.	....mark the space for name and address with "Duplicate", tell him/her that he/she will not be surveyed twice by mail, and fill in the rest of the card. (Remember: the number of Request Cards you fill out should equal the number of requests.)
....the requestor has an ERIC computer search performed, and your organization is monitoring ERIC computer searching.	....wait till the requestor has had a chance to review the full search output before sending us the Request Card.
....the requestor refuses to supply name and address.	....try to fill out the rest of the Request Card and write "Refusal" by the name and address section of the Request Card.
... you go up to a requestor to ask for his/her name and address and the requestor then asks for your assistance in using ERIC, is this "assisted" or "unassisted" use?	...."assisted" because the requestor's use of or satisfaction with ERIC may be dependent upon the type of assistance provided.
....you have a closed collection, requiring that the requestor seek staff assistance.	....this is considered an "assisted" request.
....a requestor gives you or your staff a list of ED numbers.	....be sure to ask the requestor what is the topic or nature of the request.
....you receive directional requests such as "where is the ERIC microfich collection?" or "what hours are the ERIC microfiche collection available?"	....these "directional" requests are not within the scope of this study and therefore a Request Card should not be completed.

REMEMBER...the number of Request Cards you send us at the end of the week should approximate the number of requests which resulted in the total number of requests of your assigned ERIC product or service.

6. How to Contact King Research/When King Research Will Contact You

You can call King Research at any time before or during data collection. The person to contact is Colleen Schell, Survey Director. If she is unavailable Dr. Dennis McDonald, the Project Director can help you. Both are very willing to respond to any request you may have and/or any questions on the project and data collection. Also, if you run into any problems, they will be glad to help in any way possible.

When you call, please call collect at (301) 881-6766 for Colleen Schell,
or
(202) 393-2619 for Dennis McDonald.

The mailing address for King Research is:

King Research, Inc.
P. O. Box 71
Rockville, Md. 20850

7. When to Send Request Cards to King Research

Included in your data collection materials are Transmittal Logs and return envelopes for sending the Request Cards back to King Research.

At the end of each week of data collection, you must return the completed request cards and a transmittal log in the postage-paid return envelopes to:

King Research, Inc.
P. O. Box 71
Rockville, Md. 20850

Please rubber band all the completed Request Cards together and fill out a Transmittal Log for each package you send. The transmittal log asks for:

1. Total number of Request Cards sent;
2. Does this number approximate the number of requests which resulted in the use of your assigned ERIC product/service;
3. If no on item 2, why not -- describe what circumstances made it difficult to collect request cards for the additional uses; and
4. If no on item 2, how many actual uses of your assigned ERIC product/service were made.

Send the package to King Research on each Monday following a week of data collection. Please call Colleen Schell at King Research if you are unable to send the package at the desired time.

Also, when you return your last package of Request Cards to us, please also return the filled-out Final Transmittal Log.

THANK YOU FOR YOUR
CONTINUING COOPERATION.

King Research, Inc.
P. O. Box 71
Rockville, Md. 20850
(301) 881-6766

THE ERIC COST AND USAGE STUDY

TRANSMITTAL LOG

FOR ERIC REQUEST CARDS

Return this Log at the end of each week during which you are monitoring ERIC.

ID#____________________

DATE: ____________________
(Month) (Day)

Total Number of Completed Request Cards in this package: ____________________
(Enter Number)

Check the box to the right if the number of Request Cards does not approximate the total number of requests which resulted in the use of your assigned ERIC product or service: ☐
(Check Box)

Briefly explain the reasons for the added requests: ____________________

____

____

____

____

Number of Actual Requests: ____________________
(Enter Number)

Signature of Staff Member: ____________________

Telephone Number of Staff Member: (   ) ____________________

King Research, Inc.
P. O. Box 71
Rockville, Md. 20850
(301) 881-6766

THE ERIC COST AND USAGE STUDY
FINAL TRANSMITTAL LOG
FOR ERIC REQUEST CARDS

Please return this Log with your Final shipment of Request Cards, along with the weekly Transmittal Log.

ID# ______________________ DATE: ____________
(Month) (Day)

1. Insert the total number of Request Cards returned since you began monitoring ERIC for this study .... ☐

2. How many "working days" did it take you to complete these ERIC Request Cards? (For example, if you are open for service 6 hours per day, 6 hours would count as one "working day.") .... ☐

3. Altogether, excluding holidays, semester breaks (if applicable), and closing during the summer, etc., how many "working days" is your organization open during the year? .... ☐

4. It is possible that the number of ERIC requests you receive varies from month-to-month and season-to-season. Based on the number of ERIC requests you have observed in this survey, please estimate how these requests vary from month-to-month:

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

For example, if you observed 10 requests in March, and March is normally twice as busy as January, insert "10" in the March box and "5" in the January box. This will help us adjust the number of requests you have observed for seasonal variations.

C.4 Request Card

A copy of the Request Card used in the Primary Survey is displayed on the next page.

(Name of access point was inserted here.)

PLEASE PRINT

ERIC COST and USAGE STUDY
– ERIC REQUEST CARD –

USE BLACK INK

This is a voluntary survey being conducted under contract to the National Institute of Education (NIE) by King Research, Inc., P.O. Box 71, Rockville, Maryland 20850, (301) 881-6766.

MONTH ☐☐ DAY ☐☐ I.D. NUMBER ☐

NAME OF REQUESTOR:

MAILING ADDRESS INCLUDING ZIP CODE: ______________________

____

____

TELEPHONE NUMBER (_____) ______________________
Area Code NUMBER

TITLE OR TOPIC OF REQUEST:

Please insert number of ERIC documents (microfiche or papercopy) used, if applicable: _____

1. TYPE OF PRODUCT OR SERVICE INVOLVED (Circle all applicable codes)

ERIC's RIE	01
ERIC's CIJE	02
ERIC Online Search	03
ERIC Batch Search	04
ERIC Microfiche	05
ERIC Printed Report	06
ERIC Printed Bibliography	07
Other Printed Indexes	08
Other Computer Databases	09
Other Documents	10
Other (Describe) ______________	11

2. WAS THE ERIC THESAURUS USED? (Circle 1, 2, or 3)

Yes	1
No	2
Don't Know	3

3. WAS REQUESTOR ASSISTED BY STAFF? (Circle 1, 2, or 3)

Yes	1
No	2
Requestor was a Staff Member	3

4. HOW WAS REQUEST RECEIVED? (Circle 1, 2, 3, or 4)

In Person	1
Telephone	2
Mail	3
Other (Describe) ______________	4

5. HOW WAS RESPONSE DELIVERED? (Circle all applicable codes)

In Person	1
Telephone	2
Mail	3
Other (Describe) ______________	4

C.5 Request Card File Description

Listed on the following pages is the description for individual Request Card records.

```
//  JOB (M516,9309),LEVITZ,CLASS=Q
/*NOSETUP
//*COMMENT    RUN TO SAVE ERIC REQUEST CARD DATA AND PROGRAM
//PROCLIB DD DSN=CCIAPP.PROCLIB,DISP=SHR
//  EXEC SPSS
//FT04F001 DD UNIT=3350,DSN=WYL.H2KRI1.RQSTCARD,DISP=(OLD),
//   SPACE=(TRK,(20,10),RLSE),DCB=BLKSIZE=6200,VOL=SER=TS01
//FT08F001 DD DSN=WYL.H2KRI1.ERICRQST,DISP=(OLD,KEEP),
//  UNIT=3350,VOL=SER=TS01,
//  DCB=(RECFM=FB,LRECL=80,BLKSIZE=720)
//SYSIN DD *
NUMBERED       YES
RUN NAME       REQUEST CARD
DATA LIST      FIXED (1) / 1 ERICTYPE 1
                             SAMPLE 2
                             REP 3
                             REPSEQ 4-5
                             TAPESUB 6
                             SERIAL 7-8
                             ORGTYPE 9-10
                             IDNUM 1-10
                             APNUM 1-6
                             ID1 2-6
                             MONTH 11-12
                             DAY 13-14
                             ZIP 15-19
                             DOCNUM 20-22
                             Q1P1 23
                             Q1P2 24
                             Q1P3 25
                             Q1P4 26
                             Q1P5 27
                             Q1P6 28
                             Q1P7 29
                             Q1P8 30
                             Q1P9 31
                             Q1P10 32
                             Q1P11 33
                             Q2 34
                             Q3 35
                             Q4 36
                             Q5 37
INPUT MEDIUM   TAPE
N OF CASES     UNKNOWN
MISSING VALUES MONTH(88,99)/
               DAY(88,99)/
               ZIP(00008,00009)/
               DOCNUM(888,999)/
               Q1P1 TO Q1P11 (9)/
               Q2 (9)/
               Q3 TO Q5 (8,9)

VAR LABELS     IDNUM UNIQUE REQUESTOR ID NUMBER/
               APNUM 1ST DIGIT EQUAL ASSIGNED ERIC PRODUCT/
               ID1 UNIQUE ACCESS POINT IDENTIFIER/
               DOCNUM #ERIC DOCUMENTS USED FICHE OR PAPER/
               Q1P1 TYPE OF PRODUCT ERIC RIE/
               Q1P2 TYPE OF PRODUCT ERIC CIJE/
               Q1P3 TYPE OF PRODUCT ERIC ONLINE SEARCH/
               Q1P4 TYPE OF PRODUCT ERIC BATCH SEARCH/
```

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                  Q1P5 TYPE OF PRODUCT ERIC MICROFICHE/
                  Q1P6 TYPE OF PRODUCT ERIC PRINTED REPORT/
                  Q1P7 TYPE OF PRODUCT ERIC PRINTED BIBLIOGRAPHY/
                  Q1P8 TYPE OF PRODUCT - OTHER PRINTED INDEXES/
                  Q1P9 TYPE OF PRODUCT - OTHER COMPUTER DATABASES/
                  Q1P10 TYPE OF PRODUCT - OTHER DOCUMENTS/
                  Q1P11 TYPE OF PRODUCT - OTHER - DESCRIBE/
                  Q2 ERIC THESAURUS USED?/
                  Q3 WAS REQUESTOR ASSISTED BY STAFF?/
                  Q4 HOW WAS REQUEST RECEIVED?/
                  Q5 HOW WAS RESPONSE DELIVERED?/

VALUE LABELS      MONTH (1)JAN  (2)FEB  (3)MAR  (4)APR
                        (5)MAY  (6)JUNE  (7)JULY  (8)AUG
                        (9)SEPT  (10)OCT  (11)NOV  (12)DEC/

VALUE LABELS      Q1P1 TO Q1P11  (1)YES  (2)NO  (9)NO RESPONSE/
                  Q2 (1)YES  (2)NO  (3)DON'T KNOW
                     (9)NO RESPONSE/
                  Q3 (1)YES  (2)NO  (3)RQSTR-STAFF MEMBER
                     (8)DON'T KNOW  (9)NO RESPONSE/
                  Q4,Q5 (1)IN PERSON  (2)TELEPHONE  (3)MAIL
                     (4)OTHER  (5)MORE THAN ONE USED
                     (8)DON'T KNOW  (9)NO RESPONSE/
ALLOCATE          TRANSPACE=30000


IF                (ID1 EQ 11010 OR 11020 OR 11030 OR 12020 OR 12030 OR
                   13010 OR 13030 OR 13040 OR 14010 OR 14020 OR 14030
                   OR 14040 OR 15010 OR 15020 OR 15030 OR 15040)
                  NEWTYPE1 = 1

IF                (ID1 EQ 12010) NEWTYPE1 = 2

IF                (ORGTYPE EQ 1 OR (ID1 EQ 31230 OR 31330 OR 43290 OR
                   55140))
                  NEWTYPE1 = 3

IF                (ORGTYPE EQ 2 OR (ID1 EQ 22420 OR 44080)) NEWTYPE1 = 4

IF                (ID1 EQ 24211 OR 24440 OR 41140 OR 42130 OR 42240 OR
                   44201 OR 44420 OR 25450)
                  NEWTYPE1 = 5

IF                (ORGTYPE EQ 3 OR (ID1 EQ 21140 OR 42350)) NEWTYPE1 = 6

IF                (ID1 EQ 33140 OR 51200 OR 64060) NEWTYPE1 = 7

IF                (ID1 EQ 21160 OR 22180 OR 23160 OR 43160 OR 52090 OR
                   54110 OR 62040 OR 42140)
                  NEWTYPE1 = 8

IF                (ORGTYPE EQ 8) NEWTYPE1 = 9

IF                (ORGTYPE EQ 9) NEWTYPE1 = 10

IF                (ORGTYPE EQ 10 OR (ID1 EQ 44110)) NEWTYPE1 = 11

IF                (ORGTYPE EQ 6) NEWTYPE1 = 12

IF                (ORGTYPE EQ 5) NEWTYPE1 = 13

IF             (ORGTYPE EQ 4) NEWTYPE1 = 14

IF             (ORGTYPE EQ 11 OR (ID1 EQ 34290)) NEWTYPE1 = 15

IF             (ORGTYPE EQ 12 OR (ID1 EQ 24200 OR 21240)) NEWTYPE1 = 16

IF             (ORGTYPE EQ 13 OR (ID1 EQ 72040)) NEWTYPE1 = 17

IF             (ORGTYPE EQ 14 AND ID1 EQ 21330 OR 22200 OR 23320 OR
                24070 OR 24350 OR 25140 OR 25240 OR 25440 OR 31500
                OR 34200 OR 34260 OR 35180 OR 41080 OR 42160 OR
                42440 OR 43010 OR 44280 OR 45360 OR 45400 OR 61080
                OR 63030 OR 73080)
               NEWTYPE1 = 18

VALUE LABELS   NEWTYPE1 (1) ERIC CLRHSES (2) ERIC FACILITY
                (3) CAMPUS MAIN LIB (4) CAMPUS DEPT LIB
                (5) CAMPUS OTH ORG (6) STATE ED AGCY (7) STATE LIB
                (8) FEDERAL LIB (9) OTHER FED CHSE (10) NIE LAB OR CTR
                (11) INTERM SRVC PROV (12) SCH DIST R&D CTR
                (13) SCH LIB DISTRICT (14) SCH LIB LOCAL
                (15) PUBLIC LIBRARY (16) SOCIETY OR ASSOC
                (17) BUSINESS OR CORP (18) OTHER

IF             (NEWTYPE1 EQ 1 OR 2) NEWTYPE2 = 1

IF             (NEWTYPE1 EQ 3 OR 4 OR 5) NEWTYPE2 = 2

IF             (NEWTYPE1 EQ 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13
                OR 14 OR 15 OR 16 OR 17 OR 18)
               NEWTYPE2 = 3

VALUE LABELS   NEWTYPE2 (1) ERIC CLHSE & FAC (2) ACADEMIC ACC PTS
                (3) OTHER ACC PTS

VAR LABELS     NEWTYPE1 TYPE OF ORGANIZATION-LONG/
               NEWTYPE2 TYPE OF ORGANIZATION-SHORT

FREQUENCIES    GENERAL=ALL

SAVE FILE      ROSTCARD

FINISH
```

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```
                  HH         HH     2222222222    KK         KK  RRRRRRRRRR       IIIIIIIIII          11        3333333333           11
                 HH         HH   222222222222    KK        KK   RRRRRRRRRRR      IIIIIIIIII         111       333333333333        111
                HH         HH   22         22   KK      KK     RR         RR        II           1111        33         33      1111
               HH         HH              22   KK     KK      RR         RR        II             11                   33        11
              HH         HH              22   KK    KK       RR         RR        II             11                   33        11
             HHHHHHHHHHHH              22   KKKKKKK         RRRRRRRRRRR          II             11                3333         11
            HHHHHHHHHHHH            22     KKKKKK          RRRRRRRRRR           II             11                3333         11
           HH         HH        22        KK     KK       RR    RR             II             11                   33        11
          HH         HH      22          KK      KK     RR      RR            II             11                   33        11
         HH         HH    22            KK       KK    RR       RR           II             11       33          33        11
        HH         HH  222222222222    KK        KK   RR        RR     IIIIIIIIII     1111111111    333333333333     1111111111
       HH         HH  222222222222    KK         KK  RR         RR    IIIIIIIIII     1111111111     3333333333      1111111111

                     JJJJJJJJJ     3333333333     8888888888     9999999999                                AAAAAAAAAA
                     JJJJJJJJJ    333333333333   888888888888   999999999999                              AAAAAAAAAAAA
                          JJ      33        33   88        88   99        99                              AA        AA
                          JJ                33    88       88   99        99                              AA        AA
                          JJ                33    88      88    99        99                              AA        AA
                          JJ             3333      88888888     999999999999                              AAAAAAAAAAAA
                          JJ             3333      88888888     999999999999                              AAAAAAAAAAAA
                          JJ                33    88      88              99                              AA        AA
                   JJ     JJ                33   88        88             99                              AA        AA
                   JJ     JJ      33        33   88        88   99        99                              AA        AA
                   JJJJJJJ        333333333333   888888888888   999999999999                              AA        AA
                    JJJJJ          3333333333     8888888888     9999999999                               AA        AA

****A   END   JOB   389  H2KRI131  H2KRI1                 ACCT M516   12.14.52 PM 31 JUL 81  PRINTER6  SYS IT58   JOB  389   END   A****
****A   END   JOB   389  H2KRI131  H2KRI1                 ACCT M516   12.14.52 PM 31 JUL 81  PRINTER6  SYS IT58   JOB  389   END   A****
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APPENDIX D
REQUESTOR POPULATION SURVEY
DESCRIPTION OF METHODS

The purpose of the Requestor Population Survey was to obtain data on the use of ERIC products and services monitored during the course of the Access Point Primary Survey. Included were questions describing the purposes for which ERIC information was sought, satisfaction with and evaluation of the information obtained, and awareness and use of other ERIC products and services.

D.1 Conceptual Design

The survey was designed to answer the following major questions:

1. Who uses ERIC?
2. How is access obtained to ERIC?
3. Why and for what purpose is ERIC used?
4. How useful is ERIC?

During the early stages of this project, we introduced the concept of the ERIC "requestor", a term we preferred to use instead of the term "user". We introduced this term since we felt that the term "user" in the context of information services and systems is ill-defined and possibly misleading, for the following reasons:

1. ERIC is a system where a potentially large proportion of "users" function as intermediaries for other users. In other words, individuals who obtain ERIC products and services may, in fact, do so with the intent of passing along ERIC information (in an original or synthesized form) to others.

2. The concept of "usage" is itself ill-defined since usage is really composed of a variety of functions, not all of which are directly measurable or reportable.

3. "Usage" is also difficult to measure since information products or services are often used in combination, i.e. a single request for information may result in access to a variety of different ERIC and non-ERIC products and services, dependent not only upon the nature of the request itself but also upon the availability (and affordability) of various products and services.

We thus approached the conduct of the Requestor Population Survey as a means by which our understanding of the "use" of ERIC information could be enhanced; this in turn, could expand our understanding of information usage in general.

D.2 Questionnaire and Survey Design

Another decision made very early in the study was that the survey should be conducted with specific requestors concerning their use of a specific product or service requested or obtained during a specific contact with, or visit to, a specific ERIC access point. This raised certain survey and questionnaire design problems, the primary one being the degree to which a standardized questionnaire could be developed which would still enable the surveyed requestor to react to a specific ERIC product or service request. This was compounded by the fact that ERIC products and services are often used in combination with other ERIC and non-ERIC information services. In other words, if we asked a requestor to evaluate his or her use of RIE, would it be possible to separate out satisfaction with RIE without taking into account possible use of ERIC microfiche?

During the course of questionnaire development and pretesting,[1] we made the following design decisions:

1. One standardized questionnaire would be developed for conducting the Requestor Population Survey.

2. Requestors would receive copies of the Request Card collected during the Access Point Primary Survey. The Request Card supplied the following information critical to the requestor's assessment of the ERIC product or service monitored during the Primary Survey: name of the access point; name and address of requestor; topic or title of request; number of documents obtained, if any; types of ERIC and non-ERIC products and services used; whether or not the ERIC thesaurus was used; whether the requestor was assisted by access point staff; how the access point was contacted; how a response to the request was received.

3. Respondents would be asked to describe the circumstances surrounding their request so that the frequency with which two or more ERIC products or services were used could be taken into account.

D.3 Questionnaire Items

Questions on the Requestor Population Survey questionnaire were divided into the following groups:

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[1] We would like to acknowledge the help and support provided by Elsie Leonard and George "Ira" Stancil of the Maryland State Department of Education's Media Services Center, who helped by providing feedback on questionnaire design as well as the names and addresses of ERIC requestors with whom we pretested the questionnaire.

Group 1: Questions referring specifically to the ERIC product or service specified on the copy of the Request Card which accompanied the questionnaire (questions 1 through 16).

Group 2: Questions referring to other ERIC organizations, products, and services which may have been contacted or utilized for the request topic specified on the ERIC Request Card (questions 17 through 19).

Group 3: Standard demographics such as age, sex, income, and employment status (questions 20 through 24, identical to the demographic questions asked on the Education Population Survey questionnaire).

Table D.1 displays the sample size and return rate for the mail questionnaire Requestor Population Survey, conducted during the months May through July, 1981, based on a sample of Request Cards, the majority of which were filled out during March and April, 1981. Given a specified sample size of 1,000, we endeavored to subdivide the sample so that individual cells in the table would be individually reported. Because of several deficiencies in the returns from the Primary Survey, it was not always possible to do this, as was the case for CIJE requestors sampled from the category "Other Access Points". Thus, most of the analyses in this report are presented subdivided either by ERIC Category or by Type of Access Point, rather than both simultaneously.

Sampling weights were calculated on the basis of returns generated by requestors sampled from individual access points; all access points which provided Request Cards were represented with one or more mailed-out questionnaires in the Requestor Population Survey. The sampling weights were applied during analysis to project survey responses to the total number of estimated requests in 1980, as reported by Access Points in the Screener and Primary Survey.

Table D.1 Sample Size (n_1) and Response Rates (n_2) for ERIC Requestor Population Survey, by Type of Access Point and ERIC Category

ERIC Category	Type of Access Point							
	ERIC Clearing-houses & Facility		Academic Access Points		Other Access Points		All Access Points	
	n_1	n_2	n_1	n_2	n_1	n_2	n_1	n_2
RIE	72	32	70	35	6	6	148	73
CIJE	47	25	79	26	39	23	165	74
Documents	96	65	147	74	144	19	387	158
Searches	127	58	146	69	27	103	300	230
Total	342	180	442	204	216	151	1000	535

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Requestor Population Survey, 1981.

D.4 Requestor Population Survey Questionnaire

The Requestor Population Survey questionnaire is displayed on the next pages, along with its cover letter. The reader should note also that the requestor's Request Card (collected during the course of the Access Point Primary Survey) was photocopied onto the back of the cover letter prior to mail-out so that the requestor would be reminded of the topic or title of his/her request, the access point contacted, and the type of ERIC product or service used.

UNITED STATES DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
WASHINGTON, D.C. 20208

Dear ERIC User:

Recently you requested a product or service that is supported by the Educational Resources Information Center (ERIC). This product or service is identified on the back of this letter. ERIC products and services are supported, in part, by the National Institute of Education and intended to provide information about the access to the research and practice literature of education. The NIE has contracted with King Research, Inc. to conduct a study of ERIC. The study will gather information about costs associated with the production and distribution of ERIC resources as well as information about the people such products and services are reaching.

A voluntary national survey of persons who have recently requested ERIC information is being conducted as part of the study. You have been selected as one of the 1,000 persons being asked to participate in the study by completing the enclosed questionnaire. The information you provide will be reported only in summary form and individuals' names will not be associated with specific responses; it is King Research's policy not to reveal the names of survey respondents to anyone other than staff members who are responsible for conducting the survey. While King Research does assign an identification number to each sampled individual, this identification number is used only for follow-up and other internal record keeping purposes. It will be impossible to link names to identification numbers once the survey is completed.

The completed questionnaire should be returned to King Research, Inc., in the enclosed postage-paid envelope. If you have any questions about this survey, please call collect Ms. Colleen Schell, Survey Director, King Research, Inc., at (301) 881-6766.

Thank you for your cooperation.

Dennis McDonald

Dennis McDonald, Ph.D.
Project Director
ERIC Cost and Usage Study

Joseph Heinmiller, Ed.D.
Project Officer
National Institute of Education
Research and Educational Practice Unit

P.S. Please complete and return this questionnaire within the next two weeks.

U.S. DEPARTMENT OF EDUCATION

FORM APPROVED
FEDAC No. S223
Approval Expires:
May 31, 1981
I.D. Number:

This study is being conducted by King Research, Inc. under contract with the National Institute of Education.

ERIC COST AND USAGE STUDY
SURVEY OF ERIC REQUESTORS

PLEASE READ THE FOLLOWING ITEMS BEFORE BEGINNING THE QUESTIONNAIRE:

A. Several questions refer to:

- the information product or services specified on the ERIC Request Card which is copied on the back of the accompanying letter
- the date specified on the ERIC Request Card (the date you used or requested the product or service)
- the topic or title of your request (a brief description of the information topic or item you requested)
- the organization from which you obtained the ERIC product or service, as specified at the top of the ERIC Request Card.

Please answer the questions as directed by referring to the appropriate item on the ERIC Request Card which is copied on the back of the accompanying letter.

B. Please answer this questionnaire even if you requested or obtained the information specified on the ERIC Request Card for someone else.

PLEASE NOTE: There are many types of information products and services such as indexes, computerized databases, bibliographies, etc. Unless otherwise noted, throughout this questionnaire we will be concerned primarily with those information products and sercices which are provided by the Educational Resources Information Center (ERIC).

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This report is authorized by legislation (20 U.S.C. 1221e). While you are not required to respond, your cooperation is needed to make the results of the survey accurate and timely.

1. Which of the following categories best describe how you used or applied (or intended to use or apply) the information obtained from the ERIC product or service specified on the ERIC Request Card? *(CIRCLE CODE NUMBERS OF ALL THAT APPLY.)*

To support the teaching, training, or guidance of my own or someone else's students 1

To support my studying in a class I was taking 2

To support my own research project 3

To help plan, manage, administer or evaluate an organization's activities (e.g., a school, school district, state agency, or other organization) . . 4

I did not intend to use or apply the information myself since I was obtaining it for someone else's use 5

I don't remember 6

Other (please describe): ______________________________

____

______________________________ 7

2. Prior to the date on the ERIC Request Card, had you been aware that this type of ERIC product or service existed? *(CIRCLE 1, 2, OR 3.)*

Yes 1

No 2

Don't Know 3

3. Approximately how much time have you spent so far on reading, examining, searching, or consulting the particular ERIC product or service which is specified on the ERIC Request Card? *(INCLUDE ONLY TIME SPENT IN CONNECTION WITH THE PARTICULAR TITLE OR TOPIC WHICH IS MENTIONED ON THE REQUEST CARD. INSERT APPROXIMATE NUMBER OF HOURS AND MINUTES IN BOX, ZERO (0) IF NONE; USE "DK" FOR "DON'T KNOW.")*

Hours	Minutes

4. How did you first find out that this type of ERIC product or service existed? *(CIRCLE CODE NUMBER OF MOST APPROPRIATE RESPONSE. PLEASE CIRCLE ONLY ONE CODE NUMBER.)*

From a teacher, professor, or employer 01

From a friend, colleague, or fellow student 02

From the staff at a library, media center, A/V department, information center, or clearinghouse 03

Found out about it by myself while doing research in a library, media center, A/V department, information center, or clearinghouse 04

Read about it in a book, report, or other document 05

Received a notice or advertisement about it in the mail 06

Saw it described in a poster at or near my place of employment or study . 07

Heard about it at a professional conference 08

Read about it in a journal, magazine, or newsletter 09

I don't remember 10

Other (describe): ______________________________

____

5. On the date specified on the ERIC Request Card, did you obtain physical access to the ERIC product or service so that it could actually be read or examined, or did you order or request it for delivery or examination at a later time? *(CIRCLE CODE NUMBER OF MOST APPROPRIATE RESPONSE.)*

Obtained physical access to it on the date specified	1
Ordered or requested it for delivery or examination at a later time . . .	2
Both of the above	3
Other (describe): ________________________________ ________________________________ ________________________________	4

6. When you used, obtained, or requested the ERIC product or service specified on the ERIC Request Card, did you have specific authors or documents in mind, or were you searching for information on a specific topic without having specific authors or documents in mind? *(PLEASE CIRCLE THE CODE NUMBER OF THE MOST APPROPRIATE RESPONSE.)*

I had specific authors or documents in mind	1
I was searching for information on a specific topic	2
Both of the above	3
Neither of the above (please describe): ________________________ ________________________________ ________________________________ ________________________________	4

7a. When you used, obtained, or requested the ERIC product or service specified on the ERIC Request Card, approximately how many documents (e.g., articles, books, reports, etc.) did you hope to identify by using this ERIC product or service? *(INSERT NUMBER IN BOX, ZERO (0) IF NONE. INSERT "NA" IF YOU DID NOT HAVE A SPECIFIC OR APPROXIMATE NUMBER OF DOCUMENTS IN MIND.)*

☐ Number of documents hoped to identify

7b. Again, when you used, obtained, or requested the ERIC product or service specified on the ERIC Request Card, approximately how many documents did you actually identify using this ERIC product or service? *(INSERT NUMBER IN BOX, ZERO (0) IF NONE. INSERT "NA" IF YOUR RESPONSE TO 7a WAS ZERO (0) OR "NA".)*

☐ Number of documents actually identified

7c. Of the documents you actually identified in question 7b, how many of these documents do you expect to be relevant to the topic or title of your request? *(INSERT NUMBER IN BOX, ZERO (0) IF NONE. INSERT "NA" IF YOUR RESPONSE TO 7b WAS ZERO (0) OR "NA".)*

☐ Number of relevant documents

8. If you identified titles of any useful or relevant documents (question 7c above), have you been able to obtain access to these documents so that you could read or examine them? *(CIRCLE CODE NUMBER OF MOST APPROPRIATE RESPONSE.)*

No relevant documents were identified 1

I did not need to obtain access to these documents 2

I have not yet tried to obtain access to the identified documents 3

Have obtained access to none of the documents even though I have tried . 4

Have obtained access to some of the documents 5

Have obtained access to most of the documents 6

Have obtained access to all of the documents 7

Other (please describe): ______________________________

____

________________________________ 8

9. Has the information you obtained from the particular ERIC product or service helped you to identify any information sources other than documents which are useful or relevant to the title or topic specified on the ERIC Request Card? *(CIRCLE 1, 2, OR 3.)*

Yes . . . . 1 → *(continue with Q#10)*

No . . . . 2 } *(skip to Q#11)*

Don't Know . . . . 3 }

10. Please circle the code numbers corresponding to those other information sources which you identified from the ERIC product or service specified on the ERIC Request Card. *(CIRCLE CODE NUMBERS OF ALL THAT APPLY.)*

Names of individuals who could be contacted for additional information . . 1

Names of organizations which could be contacted for further information . 2

Names of programs or projects (e.g., demonstration projects, research projects, etc.) 3

Other sources of additional useful or relevant information (please describe): ______________________________

____

________________________________ 4

11. Overall, how satisfied are you with the information you obtained from the ERIC product or service specified on the ERIC Request Card? *(CIRCLE APPROPRIATE CODE NUMBER.)*

Highly satisfied 1

Somewhat satisfied 2

Neither satisfied nor dissatisfied 3

Somewhat dissatisfied 4

Highly dissatisfied 5

12. Based on your past experience, would you use the type of ERIC product or service mentioned on your ERIC Request Card in the future? *(CIRCLE 1 OR 2.)*

Yes 1

No 2

13. For each of the attributes listed below, please rate on a 1-to-5 scale the information you obtained from the ERIC product or service specified on the ERIC Request Card. *(USE "1" FOR "LOW" AND "5" FOR "HIGH", WITH 2, 3, OR 4 FOR RATINGS BETWEEN 1 AND 5.)*

ATTRIBUTE	LOW				HIGH
A. Relevance (degree to which the ERIC product or service provided you with or directed you to information directly related to the title or topic of your request)	1	2	3	4	5
B. Completeness (degree to which the ERIC product or service provided you with or directed you to all the information you needed)	1	2	3	4	5
C. Practicality (degree to which the ERIC product or service provided you with or directed you to information which was practical or immediately useable for your needs)	1	2	3	4	5
D. Appropriateness (degree to which the ERIC product or service provided you with or directed you to information which was presented at a technical level or level of detail which was appropriate to your needs)	1	2	3	4	5
E. Newness (degree to which the ERIC product or service provided you with or directed you to information about which you were previously unaware	1	2	3	4	5

14. Did you, yourself, pay out of your own funds for using or obtaining the ERIC product or service which is specified on the ERIC Request Card? *(CIRCLE 2 OR 2.)*

Yes 1

No . . . . 2 *(skip to Q#16)*

15. Approximately how much did you, yourself, pay for using or obtaining this ERIC product or service? *(INSERT DOLLARS AND CENTS IN BOX.)*

$.

16. Excluding the product or service identified on the ERIC Request Card, approximately how many times during the past six months have you had questions, problems, or information needs which lead to your using or obtaining the same type of ERIC product or service specified on the ERIC Request Card? *(INSERT NUMBER IN BOX, ZERO (0) IF NONE.)*

times

17. Have you ever contacted any of the following ERIC organizations in connection with the topic or title specified on the ERIC Request Card? *(CIRCLE 1 FOR "YES", 2 FOR "NO", OR 3 FOR "NOT SURE".)*

	ERIC ORGANIZATION NAME	Yes	No	Not Sure
1)	Adult, Career & Vocational Education Clearinghouse (Ohio State U., Columbus, OH)	1	2	3
2)	Counseling & Personnel Services Clearinghouse (U. of Michigan, Ann Arbor, MI)	1	2	3
3)	Educational Management Clearinghouse (U. of Oregon, Eugene, OR)	1	2	3
4)	Elementary & Early Childhood Education Clearinghouse (U. of Illinois, Urbana, IL)	1	2	3
5)	Handicapped & Gifted Children Clearinghouse (Council for Exceptional Children, Reston, VA)	1	2	3
6)	Higher Education Clearinghouse (George Washington U., Washington, DC)	1	2	3
7)	Information Resources Clearinghouse (Syracuse U., Syracuse, NY)	1	2	3
8)	Junior Colleges Clearinghouse (U. of California, Los Angeles, CA)	1	2	3
9)	Languages & Linguistics Clearinghouse (Center for Applied Linguistics, Arlington, VA)	1	2	3
10)	Reading & Communication Skills Clearinghouse (National Council of Teachers of English, Urbana, IL)	1	2	3
11)	Rural Education & Small Schools Clearinghouse (New Mexico State U., Las Cruces, NM)	1	2	3
12)	Science, Mathematics, & Environmental Education Clearinghouse (Ohio State U., Columbus, OH)	1	2	3
13)	Social Studies/Social Sciences Education Clearinghouse (Boulder, CO)	1	2	3
14)	Teacher Education Clearinghouse (Amer. Assoc. of Colleges for Teacher Education, Washington, DC)	1	2	3
15)	Tests, Measurements & Evaluation Clearinghouse (Educational Testing Service, Princeton, NJ)	1	2	3
16)	Urban Education Clearinghouse (Columbia U., New York, NY)	1	2	3
17)	ERIC Processing and Reference Facility (Bethesda, MD)	1	2	3
18)	ERIC Document Reproduction Service (EDRS, Arlington, VA)	1	2	3

18. In addition to the ones specified on the ERIC Request Card, which of the following ERIC products and services have you used or obtained in connection with the topic or title specified on the ERIC Request Card? *(CIRCLE 1, 2, OR 3 FOR EACH CATEGORY.)*

ERIC PRODUCT OR SERVICE CATEGORY	USED	NOT USED	NOT SURE
1) RIE (Resources in Education, a monthly ERIC Journal which abstracts and indexes the educational report literature).	1	2	3
2) CIJE (Current Index to Journals in Education, a monthly journal which covers the educational periodical literature)	1	2	3
3) Computer Searching of ERIC (computerized searching of the ERIC bibliographic database, often conducted through use of a terminal interacting via telephone with a computer, or conducted by grouping several requests together for submission at one time to a computer).	1	2	3
4) ERIC Microfiche (pages photographically reduced to fit on an index-card-sized piece of film, requiring use of a magnifying or projection device to read)	1	2	3
5) ERIC Printed Report (any report produced or supplied by ERIC, which is printed on paper, usually with an "ED" identifying number)	1	2	3
6) Printed Bibliography (any list of bibliographic references, other than computer printouts from an online or batch search of the ERIC database, which is produced and distributed on paper by any ERIC organization)	1	2	3
7) ERIC Referral Services (the provision by any ERIC organization of names of programs, individuals, or organizations which can be contacted by the requestor for additional information. Referral services are often provided in person, by phone, or by letter instead of through distribution of previously-produced printed reports, documents, or bibliographies.)	1	2	3
8) Other (any other ERIC product or service not included above. Please describe.) . . . ____________________ ____________________ ______________	1	2	3

19. Listed below are major categories of information products or services which are produced and/or distributed by sources other than ERIC. For each category, please indicate if at any time you used or obtained it in connection with the topic or title specified on the ERIC Request Card. *(CIRCLE 1, 2, OR 3 FOR EACH CATEGORY.)*

INFORMATION PRODUCT OR SERVICE CATEGORY	USED	NOT USED	NOT SURE
1) Other printed documents (i.e., books, articles, reports)	1	2	3
2) Other organizations or departments separate from the one on the Request Card (i.e., other libraries, Clearinghouses, etc.)	1	2	3
3) Experts or people knowledgeable in the area of my request	1	2	3
4) My own friends, colleagues, students, or other personal acquaintances	1	2	3
5) Computerized information systems--textual, numeric, or bibliographic databases or retrieval systems	1	2	3
6) Prerecorded audio or visual sources (i.e., records, cassettes, slides, etc.)	1	2	3
7) Other (describe): ______________________________	1	2	3
8) Other (describe): ______________________________	1	2	3
9) Other (describe): ______________________________	1	2	3

20. Finally, a few questions for statistical purposes only ... What is your age?

Under 25	1
25 to 34	2
35 to 44	3
45 to 54	4
55 to 64	5
65 and over	6

21. What is the highest degree you have obtained?

High school diploma or less	1
Associate degree	2
Bachelor's degree	3
Master's degree	4
Master's degree plus postgraduate coursework	5
Doctorate	6
Law or Medical degree	7
Other (please describe): ______________________________ ______________________________	8

22. Which of the following categories best describes your current employer or primary affiliation? *(CIRCLE ONE ONLY.)*

Junior college or two year college	01
Four year college or university	02
State education agency	03
Other state government agency	04
Local school district	05
Local government agency	06
Elementary school	07
Secondary school	08
Federal government agency	09
Society or association	10
Research firm	11
Consulting firm	12
Private business or corporation	13
Other (please describe): ______________________________ ______________________________	14
Not employed by or affiliated with any organization	15

23. To which of the following job- or school-related functions do you regularly devote the largest proportion of your time? *(CIRCLE THE CODE NUMBER OF THE MOST APPROPRIATE RESPONSE.)*

Administration, supervision, management, or planning	1
Research or evaluation	2
Teaching, training, or counseling	3
Information support (e.g., librarian, information specialist)	4
Student	5
Other (please give job title and function): ______________________________ ______________________________ ______________________________	6

24. For statistical purposes only, which of the following categories describes your total income (before taxes) for 1980? Include your income only. Do not include the income of other immediate family members who are living with you. *(CIRCLE ONE NUMBER.)*

$35,000 or more	01
$30,000 but less than $35,000	02
$25,000 but less than $30,000	03
$20,000 but less than $25,000	04
$15,000 but less than $20,000	05
$10,000 but less than $15,000	06
$5,000 but less than $10,000	07
Under $5,000	08
No income	09
Prefer not to answer	10

THANK YOU! PLEASE RETURN THIS
QUESTIONNAIRE TO THE ADDRESS
AT THE RIGHT IN THE ENCLOSED,
POST-PAID ENVELOPE.

KING RESEARCH, INC.
P.O. BOX 71
ROCKVILLE, MD 20850

D.5 Requestor Population Survey File Description

Listed on the next pages is the description of the SPSS file description for the merged Request Card/Requestor Population Survey database (all returned Requestor questionnaires were merged with their Request Card).

```
// JOB (M516,9309),LEVITZ,CLASS=Q
/*NOSETUP
//*COMMENT     RUN TO SAVE ERIC REQUESTOR 3 CARD DATA SET
//PROCLIB DD DSN=CCIAPP.PROCLIB,DISP=SHR
//  EXEC SPSS,PARM='312K'
//FT04F001 DD UNIT=3350,DSN=WYL.H2KRI1.RQTRCOP1,
//  DISP=(OLD),
//  SPACE=(TRK,(20,10),RLSE),DCB=BLKSIZE=6200,VOL=SER=TS01
//FT08F001 DD DSN=WYL.H2KRI1.RQTRROST,DISP=(SHR),
//  UNIT=3350,VOL=SER=TS01,
//  DCB=(RECFM=FB,LRECL=80,BLKSIZE=720)
//SYSIN DD *
NUMBERED          YES
RUN NAME          REQUESTOR COMPLETED
DATA LIST         FIXED (3)/1   IDNUM 1-10
                                ERICTYPE 1
                                SAMPLE 2
                                REP 3
                                REPSEQ 4-5
                                TAPESUB 6
                                SERIAL 7-8
                                ORGTYPE 9-10
                                APNUM 1-6
                                ID1 2-6
                                CARD1 11
                                Q1P1   12
                                Q1P2   13
                            N   Q1P3   14
                                Q1P4   15
                                Q1P5   16
                                Q1P6   17
                                Q1P7   18
                                Q2     19
                            R   Q3P1   20-22
                                Q3P2   23-24
                                Q4     25-26
                            N   RQ4     25-26
                                Q5     27
                                Q6     28
                            O   Q7A    29-31
                                Q7B    32-34
                                Q7C    35-37
                                Q8     38-39
                                Q9     40
                                Q10P1  41
                                Q10P2  42
                            N   Q10P3  43
                                Q10P4  44
                                Q11    45
                                Q12    46
                                Q13P1  47
                                Q13P2  48
                                Q13P3  49
                                Q13P4  50
                                Q13P5  51
                                Q14    52
                            O   Q15    53-57
                                Q16    58-60
                                Q17P1  61
                                Q17P2  62
```

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              Q17P3 63
              Q17P4 64
              Q17P5 65
              Q17P6 66
              Q17P7 67
              Q17P8 68
              Q17P9 69
              Q17P10 70
              Q17P11 71
              Q17P12 72
              Q17P13 73
              Q17P14 74
              Q17P15 75
              Q17P16 76
              Q17P17 77
              Q17P18 78/
2  ID2 1-10
   CARD2   11
   Q18P1   12
   Q18P2   13
   Q18P3   14
   Q18P4   15
   Q18P5   16
   Q18P6   17
2  Q18P7   18
   Q18P8   19
   Q19P1   20
   Q19P2   21
   Q19P3   22
   Q19P4   23
   Q19P5   24
   Q19P6   25
   Q19P7   26
   Q20     27
   RQ20      27
   Q21     28-29
   RQ21      28-29
   Q22     30-31
   RQ22      30-31
   Q23     32
   RQ23    32
   Q24     33-34
   RQ24      33-34/
             3 RCERICTY 1
               RCSAMPLE 2
               RCREP 3
               RCREPSEQ 4-5
               RCTAPES 6
               RCSERIAL 7-8
               RCORGTYP 9-10
               RCIDNUM 1-10
               RCAPNUM 1-6
               RCID3 2-6
               MONTH 11-12
               DAY 13-14
               ZIP 15-19
            0<-RCDOCNUM 20-22
               RCQ1P1 23
               RCQ1P2 24
               RCQ1P3 25
             N RCQ1P4 26
```

D-20

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                                    RCQ1P5 27
                                    RCQ1P6 28
                                    RCQ1P7 29
                                    RCQ1P8 30
                                 N  RCQ1P9 31
                                    RCQ1P10 32
                                    RCQ1P11 33
                                    RCQ2 34
                                 N  RCQ3 35
                                    RCQ4 36
                                    RCQ5 37
                                    RQWEIGHT 38-41

        INPUT MEDIUM   TAPE
        N OF CASES     UNKNOWN

        MISSING VALUES Q1P1 TO Q1P7 (8,9)/
                       Q2 (9)/
                       Q3P1 (888,999)/
                       Q3P2 (88,99)/
                       Q4 (88,99)/
                       Q5,Q6 (8,9)/
                       Q7A TO Q7C (777,888,999)/
                       Q8 (88,99)/
                       Q9 (9)/
                       Q10P1 TO Q10P4 (7,9)/
                       Q11,Q12 (8,9)/
                       Q13P1 TO Q13P5 (8,9)/
                       Q14 (8,9)/
                       Q15 (777.77,888.88,999.99)/
                       Q16 (888,999)/
                       Q17P1 TO Q17P18 (9)/
                       Q18P1 TO Q18P8 (9)/
                       Q19P1 TO Q19P7 (9)/
                       Q20 (9)/
                       Q21 (99)/
                       Q22 (99)/
                       Q23 (9)/
                       Q24 (99)

        VAR LABELS     Q1P1 INFO USED FOR TEACHING,GUIDING STUDENTS/
                       Q1P2 INFO USED TO SUPPORT OWN STUDY FOR CLASS/
                       Q1P3 INFO USED TO SUPPORT OWN RESEARCH PROJECT/
                       Q1P4 INFO USED TO PLAN, EVAL ORGANTNL ACTIV/
                       Q1P5 INFO USED FOR SOMEONE ELSE'S USE/
                       Q1P6 I DON'T REMEMBER/
                       Q1P7 OTHER/
                       Q2 DID YOU KNOW OF ERIC BEFORE?/
                       Q3P1 HOURS SPENT ON ERIC/
                       Q3P2 MINUTES SPENT ON ERIC/
                       Q4 HOW DID YOU LEARN OF ERIC?/
                       Q5 ACCESS TO ERIC/
                       Q6 TYPE OF INFO SOUGHT/
                       Q7A NO. OF DOCUMENTS HOPED TO IDENTIFY/
                       Q7B TOTAL NO. OF DOCUMENTS IDENTIFIED/
                       Q7C NO. OF RELEVANT DOCUMENTS IDENTIFIED/
                       Q8 ABILITY TO ACCESS DOCUMENTS/
                       Q9 DID ERIC HELP FIND NON-DOCUMENT SOURCES?/
                       Q10P1 OTHER SOURCES IDENTIFIED - INDIVIDUALS/
                       Q10P2 OTHER SOURCES IDENTIFIED - ORGANIZATIONS/
                       Q10P3 OTHER SOURCES IDENTIFIED - PROJECTS/
```

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                         Q10P4 OTHER SOURCES IDENTIFIED - OTHER/
                         Q11 SATISFACTION WITH ERIC/
                         Q12 WOULD YOU USE ERIC AGAIN?/
                         Q13P1 RELEVANCE/
                         Q13P2 COMPLETENESS/
                         Q13P3 PRACTICALITY/
                         Q13P4 APPROPRIATENESS/
                         Q13P5 NEWNESS/
                         Q14 DID YOU PAY FOR ERIC YOURSELF?/
                         Q15 PRICE PAID/
                         Q16 USES OF SAME ERIC SERVICES IN PAST 6 MONTHS/
                         Q17P1 ADULT, CAREER & VOCATIONAL EDUCATION/
                         Q17P2 COUNSELING & PERSONNEL SERVICES/
                         Q17P3 EDUCATIONAL MANAGEMENT/
                         Q17P4 ELEMENTARY & EARLY CHILDHOOD EDUCATION/
                         Q17P5 HANDICAPPED & GIFTED CHILDREN/
                         Q17P6 HIGHER EDUCATION/
                         Q17P7 INFORMATION RESOURCES/
                         Q17P8 JUNIOR COLLEGES/
                         Q17P9 LANUAGES & LINGUISTICS/
                         Q17P10 READING & COMMUNICATION SKILLS/
                         Q17P11 RURAL EDUCATION & SMALL SCHOOLS/
                         Q17P12 SCIENCE, MATHEMATICS, & ENVIRONMENTAL ED/
                         Q17P13 SOCIAL STUDIES - SOCIAL SCIENCES EDUCATN/
                         Q17P14 TEACHER EDUCATION/
                         Q17P15 TESTS, MEASUREMENTS & EVALUATIONS/
                         Q17P16 URBAN EDUCATION/
                         Q17P17 ERIC FACILITIES/
                         Q17P18 ERIC DOCUMENT REPRODUCTION SERVICE/
                         Q18P1 RIE/
                         Q18P2 CIJE/
                         Q18P3 COMPUTER SEARCHING OF ERIC/
                         Q18P4 ERIC MICROFICHE/
                         Q18P5 ERIC PRINTED REPORT/
                         Q18P6 ERIC PRINTED BIB/
                         Q18P7 ERIC REFERRAL SERVICES/
                         Q18P8 OTHER ERIC PRODUCT OR SERVICE/
                         Q19P1 OTHER PRINTED DOCUMENTS/
                         Q19P2 OTHER ORGANIZATIONS OR DEPARTMENTS/
                         Q19P3 EXPERTS/
                         Q19P4 FRIENDS OR PERSONAL ACQUAINTANCES/
                         Q19P5 COMPUTERIZED INFORMATION SYSTEMS/
                         Q19P6 PRERECORDED AUDIO OR VISUAL SOURCES/
                         Q19P7 OTHER PRODUCT OR SERVICE CATEGORY/
                         Q20 AGE GROUP/
                         Q21 DEGREES/
                         Q22 CURRENT EMPLOYER/
                         Q23 PRIMARY JOB FUNCTION/
                         Q24 INCOME FOR 1980/
                         IDNUM UNIQUE REQUESTOR ID NUMBER/
                         APNUM 1ST DIGIT EQUAL ASSIGNED ERIC PRODUCT/
                         ID1 UNIQUE ACCESS POINT IDENTIFIER/

        VALUE LABELS     Q1P1 TO Q1P7 (1)YES (2)NO
                                    (8)DON'T KNOW (9)NO RESPONSE/
                         Q2 (1)YES (2)NO (3)DON'T KNOW
                            (9)NO RESPONSE/
                         Q3P1 (888)DON'T KNOW (999)NO RESPONSE/
                         Q3P2 (88)DON'T KNOW (99)NO RESPONSE/
                         Q4 (1)TEACHER OR EMPLOYER (2)FRIEND
                            (3)LIBRARY OR INFORMATION CENTER STAFF
```

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244.                (4)SELF SEARCH AT LIBRARY, ETC.
245.                (5)BOOK, REPORT OR DOCUMENT
246.                (6)MAIL AD  (7)POSTER AD  (8)CONFERENCE
247.                (9)MAGAZINES OR NEWSLETTERS
248.                (10)DON'T REMEMBER  (11)OTHER
249.                (88)DON'T KNOW  (99)NO RESPONSE/
250.             Q5 (1)ACCESS ON DATE SPECIFIED
251.                (2)ORDERED ON DATE SPECIFIED
252.                (3)BOTH  (4)OTHER  (8)DON'T KNOW
253.                (9)NO RESPONSE/
254.             Q6 (1)SPECIFIC AUTHORS OR DOCUMENTS
255.                (2)SPECIFIC TOPIC  (3)BOTH
256.                (4)NEITHER  (8)DON'T KNOW
257.                (9)NO RESPONSE/
258.             Q7A TO Q7C (777)NOT APPLICABLE
259.                        (888)DON'T KNOW
260.                        (999)NO RESPONSE/
261.             Q8 (1)NO RELEVANT DOCUMENT
262.                (2)NO NEED TO ACCESS
263.                (3)NOT YET TRIED TO ACCESS
264.                (4)NOT ABLE TO ACCESS
265.                (5)HAVE OBTAINED SOME
266.                (6)HAVE OBTAINED MOST
267.                (7)HAVE OBTAINED ALL
268.                (8)OTHER  (88)DON'T KNOW
269.                (99)NO RESPONSE/
270.             Q9 (1)YES (2)NO (3)DON'T KNOW
271.                (9)NO RESPONSE/
272.             Q10P1 TO Q10P4 (1)YES  (2)NO
273.                            (7)NOT APPLICABLE
274.                            (9)NO RESPONSE/
275.             Q11 (1)HIGHLY SATISFIED
276.                 (2)SOMEWHAT SATISFIED
277.                 (3)NEITHER SAT OR DISSAT
278.                 (4)SOMEWHAT DISSATISFIED
279.                 (5)HIGHLY DISSATISFIED
280.                 (8)DON'T KNOW  (9)NO RESPONSE/
281.             Q12 (1)YES  (2)NO  (8)DON'T KNOW
282.                 (9)NO RESPONSE/
283.             Q13P1 TO Q13P5  (1)LOW  (2)MED-LOW
284.                             (3)MEDIUM  (4)MED-HIGH
285.                             (5)HIGH  (8)DON'T KNOW
286.                             (9)NO RESPONSE/
287.             Q14 (1)YES  (2)NO  (8)DON'T KNOW
288.                 (9)NO RESPONSE/
289.             Q15 (777.77)NOT APPLICABLE
290.                 (888.88)DON'T KNOW
291.                 (999.99)NO RESPONSE/
292.             Q16 (888)DON'T KNOW  (999)NO RESPONSE/
293.             Q17P1 TO Q17P18 (1)YES  (2)NO
294.                             (3)NOT SURE
295.                             (9)NO RESPONSE/
296.             Q18P1 TO Q18P8  (1)USED  (2)NOT USED
297.                             (3)NOT SURE
298.                             (9)NO RESPONSE/
299.             Q19P1 TO Q19P7  (1)USED  (2)NOT USED
300.                             (3)NOT SURE
301.                             (9)NO RESPONSE/
302.             Q20 (1)UNDER 25  (2)25 TO 34
303.                 (3)35 TO 44  (4)45 TO 54
304.                 (5)55 TO 64  (6)65 AND OVER
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```
                   (9)NO RESPONSE/
               Q21 (1)HIGH SCHOOL OR LESS
                   (2)ASSOCIATES DEGREE
                   (3)BACHELOR'S DEGREE
                   (4)MASTER'S DEGREE
                   (5)MASTER'S PLUS POSTGRADUATE WORK
                   (6)DOCTORATE
                   (7)LAW OR MEDICAL DEGREE
                   (8)OTHER  (9)NO RESPONSE/
               Q22 (1)TWO YEAR COLLEGE  (2)FOUR YEAR COLLEGE
                   (3)STATE EDUCATIONAL AGENCY
                   (4)OTHER STATE GOVERNMENT AGENCY
                   (5)LOCAL SCHOOL DISTRICT
                   (6)LOCAL GOVERNMENT AGENCY
                   (7)ELEMENTARY SCHOOL
                   (8)SECONDARY SCHOOL
                   (9)FEDERAL GOVERNMENT AGENCY
                   (10)SOCIETY OR ASSOCIATION
                   (11)RESEARCH AGENCY  (12)CONSULTING FIRM
                   (13)PRIVATE BUSINESS OR CORPORATION
                   (14)OTHER  (15)NOT EMPLOYED
                   (99)NO RESPONSE/
               Q23 (1)MANAGE, PLAN OR SUPERVISE
                   (2)RESEARCH  (3)TEACHING OR COUNSELING
                   (4)INFORMATION SUPPORT
                   (5)STUDENT  (6)OTHER
                   (9)NO RESPONSE/
               Q24 (1)$35,000 OR MORE
                   (2)$30,000 TO $34,999
                   (3)$25,000 TO $29,999
                   (4)$20,000 TO $24,999
                   (5)$15,000 TO $19,999
                   (6)$10,000 TO $14,999
                   (7)$5,000 TO $9,999
                   (8)UNDER $5,000
                   (9)NO INCOME  (10)PREFER NO ANSWER
                   (99)NO RESPONSE/

VALUE LABELS   ERICTYPE (2)RIE (3)CIJE (4)SEARCHES (5)DOCUMENTS/
               SAMPLE (1)CLHSE-FACIL-EDRS (2)RIE (3)CIJE
                      (4)SEARCH SVCE (5)FICHE COLLECTION
                      (6)DEPOSIT ACCT (7)EDRS ORDERS
                      (8)TAPE SUB-NOT ACCPT SAMPLE/
               TAPESUB (0)TAPE SUBSCRIBER (1)NOT TAPE SUBSCRIBER/
VALUE LABELS   RCERICTY (2)RIE (3)CIJE (4)SEARCHES (5)DOCUMENTS/
               RCSAMPLE (1)CLHSE-FACIL-EDRS (2)RIE (3)CIJE
                      (4)SEARCH SVCE (5)FICHE COLLECTION
                      (6)DEPOSIT ACCT (7)EDRS ORDERS
                      (8)TAPE SUB-NOT ACCPT SAMPLE/
               RCTAPES (0)TAPE SUBSCRIBER (1)NOT TAPE SUBSCRIBER/
MISSING VALUES MONTH(88,99)/
               DAY(88,99)/
               ZIP(00008,00009)/
               RCDOCNUM(888,999)/
               RCQ1P1 TO RCQ1P11 (9)/
               RCQ2 (9)/
               RCQ3 TO RCQ5 (8,9)

VAR LABELS     RCIDNUM UNIQUE REQUESTOR ID NUMBER/
               RCAPNUM 1ST DIGIT EQUAL ASSIGNED ERIC PRODUCT/
               RCID3 UNIQUE ACCESS POINT IDENTIFIER/
               RCDOCNUM #ERIC DOCUMENTS USED FICHE OR PAPER/
               RCQ1P1 TYPE OF PRODUCT ERIC RIE/
               RCQ1P2 TYPE OF PRODUCT ERIC CIJE/
               RCQ1P3 TYPE OF PRODUCT ERIC ONLINE SEARCH/
               RCQ1P4 TYPE OF PRODUCT ERIC BATCH SEARCH/
               RCQ1P5 TYPE OF PRODUCT ERIC MICROFICHE/
               RCQ1P6 TYPE OF PRODUCT ERIC PRINTED REPORT/
               RCQ1P7 TYPE OF PRODUCT ERIC PRINTED BIBLIOGRAPHY/
               RCQ1P8 TYPE OF PRODUCT - OTHER PRINTED INDEXES/
               RCQ1P9 TYPE OF PRODUCT - OTHER COMPUTER DATABASES/
               RCQ1P10 TYPE OF PRODUCT - OTHER DOCUMENTS/
               RCQ1P11 TYPE OF PRODUCT - OTHER - DESCRIBE/
               RCQ2 ERIC THESAURUS USED?/
               RCQ3 WAS REQUESTOR ASSISTED BY STAFF?/
               RCQ4 HOW WAS REQUEST RECEIVED?/
               RCQ5 HOW WAS RESPONSE DELIVERED?/

VALUE LABELS   MONTH (1)JAN  (2)FEB  (3)MAR  (4)APR
                     (5)MAY  (6)JUNE  (7)JULY  (8)AUG
                     (9)SEPT  (10)OCT  (11)NOV  (12)DEC/

VALUE LABELS   RCQ1P1 TO RCQ1P11  (1)YES  (2)NO  (9)NO RESPONSE/
               RCQ2 (1)YES  (2)NO  (3)DON'T KNOW
                  (9)NO RESPONSE/
               RCQ3 (1)YES  (2)NO  (3)RQSTR-STAFF MEMBER
                  (8)DON'T KNOW  (9)NO RESPONSE/
               RCQ4,RCQ5 (1)IN PERSON  (2)TELEPHONE  (3)MAIL
                  (4)OTHER  (5)MORE THAN ONE USED
                  (8)DON'T KNOW  (9)NO RESPONSE/
               ORGTYPE,RCORGTYP (1)COL OR UN-CCF (2)COL OR UN-DF
                (3)STATE ED. AGCY (4)SCH LIB-LOCAL
                (5)SCH LIB-HDQTRS OR DIST (6)SCH DIST R&D CTR
                (7)ERIC CLRHSE (8)OTHER FED SUPPORTED
                (9)NIE-SUPPORTED (10)INTER SVCE PRVD
                (11)PUBLIC LIBRARY (12)SOC OR ASSOC
                (13)BUS OR CORP (14)OTHER (15)ERIC FACILITY/

ALLOCATE       TRANSPACE=50000

RECODE         RQ4 (1=1) (2=2) (3=3) (4=4) (5 THRU 11=5) (ELSE=9)
MISSING VALUES RQ4 (9)
VAR LABELS     RQ4 HOW LEARNED OF ERIC, RECODED
VALUE LABELS   RQ4 (1)TEACHER OR EMPLOYER (2)FRIEND
                   (3)LIBRARY OR INFORMATION (4)SELF SEARCH AT LIBR
                   (5)OTHER (9)NO RESPONSE

RECODE         RQ20 (1=1) (2=2) (3=3) (4=4) (5,6=5) (9=9)
MISSING VALUES RQ20 (9)
VAR LABELS     RQ20 AGE, RECODED
VALUE LABELS   RQ20 (1)UNDER 25 (2)25 TO 34 (3)35 TO 44 (4)45 TO 54
                    (5)55 AND OVER (9)NO RESPONSE

RECODE         RQ21 (1,2=1) (3=2) (4=3) (5=4) (6=5) (7,8,99=6)
VAR LABELS     RQ21 DEGREE, RECODED
VALUE LABELS   RQ21 (1)ASSOC DEGREE OR LESS (2)BACHELORS DEGREE
                    (3)MASTERS DEGREE (4)MASTERS+POST GRAD WK
                    (5)DOCTORATE (6)OTHER AND NO RESPONSE

RECODE         RQ22 (1,2=1) (3,4=2) (5=3) (7=4) (8=5)
                    (6,9 THRU 15,99=6)
VAR LABELS     RQ22 CURRENT EMPLOYER, RECODED
```

```
VALUE LABELS   RQ22 (1)COLLEGE OR UNIVERSITY (2)STATE GOVT AGCY
                    (3)LOCAL SCH DISTR (4)ELEMENTARY SCHL
                    (5)SECONDARY SCHL (6)OTHER OR NO RESPONSE

RECODE         RQ23 (1=1) (2=2) (3=3) (4=4) (5=5) (6,9=6)
VAR LABELS     RQ23 PRIMARY JOB FUNCTION, RECODED
VALUE LABELS   RQ23 (1)MANAGE,PLAN OR SUPER (2)RESEARCH
                    (3)TEACHING OR COUNSELI
                    (4)INFORMATION SUPPORT (5)STUDENT
                    (6)OTHER OR NO RESPONSE

RECODE         RQ24 (1=1) (2=2) (3=3) (4=4) (5=5) (6=6) (7=7) (8=8)
                    (9=9) (10,99=10)
VAR LABELS     RQ24 INCOME, RECODED
VALUE LABELS   RQ24 (1)$35,000 OR MORE (2)$30,000 TO $34,999
                    (3)$25,000 TO $$29,999 (4)$20,000 TO $24,999
                    (5)$15,000 TO $19,999 (6)$10,000 TO $14,999
                    (7)$5,000 TO $9,999 (8)UNDER $5,000
                    (9)NO INCOME (10)NO ANSWER

IF                 (ID1 EQ 11010 OR 11020 OR 11030 OR 12020 OR 12030 OR
                    13010 OR 13030 OR 13040 OR 14010 OR 14020 OR 14030
                    OR 14040 OR 15010 OR 15020 OR 15030 OR 15040)
                   NEWTYPE1 = 1

IF                 (ID1 EQ 12010) NEWTYPE1 = 2

IF                 (ORGTYPE EQ 1 OR (ID1 EQ 31230 OR 31330 OR 43290 OR
                    55140))
                   NEWTYPE1 = 3

IF                 (ORGTYPE EQ 2 OR (ID1 EQ 22420 OR 44080)) NEWTYPE1 = 4

IF                 (ID1 EQ 24211 OR 24440 OR 41140 OR 42130 OR 42240 OR
                    44201 OR 44420 OR 25450)
                   NEWTYPE1 = 5

IF                 (ORGTYPE EQ 3 OR (ID1 EQ 21140 OR 42350)) NEWTYPE1 = 6

IF                 (ID1 EQ 33140 OR 51200 OR 64060) NEWTYPE1 = 7

IF                 (ID1 EQ 21160 OR 22180 OR 23160 OR 43160 OR 52090 OR
                    54110 OR 62040 OR 42140)
                   NEWTYPE1 = 8

IF                 (ORGTYPE EQ 8) NEWTYPE1 = 9

IF                 (ORGTYPE EQ 9) NEWTYPE1 = 10

IF                 (ORGTYPE EQ 10 OR (ID1 EQ 44110)) NEWTYPE1 = 11

IF                 (ORGTYPE EQ 6) NEWTYPE1 = 12

IF                 (ORGTYPE EQ 5) NEWTYPE1 = 13

IF                 (ORGTYPE EQ 4) NEWTYPE1 = 14

IF                 (ORGTYPE EQ 11 OR (ID1 EQ 34290)) NEWTYPE1 = 15

IF                 (ORGTYPE EQ 12 OR (ID1 EQ 24200 OR 21240)) NEWTYPE1 = 16

IF             (ORGTYPE EQ 13 OR (ID1 EQ 72040)) NEWTYPE1 = 17

IF             (ORGTYPE EQ 14 AND ID1 EQ 21330 OR 22200 OR 23320 OR
                24070 OR 24350 OR 25140 OR 25240 OR 25440 OR 31500
                OR 34200 OR 34260 OR 35180 OR 41080 OR 42160 OR
                42440 OR 43010 OR 44280 OR 45360 OR 45400 OR 61080
                OR 63030 OR 73080)
               NEWTYPE1 = 18

VALUE LABELS   NEWTYPE1 (1)ERIC CLRHSES (2)ERIC FACILITY
                (3)CAMPUS MAIN LIB (4)CAMPUS DEPT LIB
                (5)CAMPUS OTH ORG (6)STATE ED AGCY (7)STATE LIB
                (8)FEDERAL LIB (9)OTHER FED CHSE (10)NIE LAB OR CTR
                (11)INTERM SRVC PROV (12)SCH DIST R&D CTR
                (13)SCH LIB DISTRICT (14)SCH LIB LOCAL
                (15)PUBLIC LIBRARY (16)SOCIETY OR ASSOC
                (17)BUSINESS OR CORP (18)OTHER

IF             (NEWTYPE1 EQ 1 OR 2) NEWTYPE2 = 1

IF             (NEWTYPE1 EQ 3 OR 4 OR 5) NEWTYPE2 = 2

IF             (NEWTYPE1 EQ 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13
                OR 14 OR 15 OR 16 OR 17 OR 18)
               NEWTYPE2 = 3

VALUE LABELS   NEWTYPE2 (1)ERIC CLHSE & FAC (2)ACADEMIC ACC PTS
                (3)OTHER ACC PTS

VAR LABELS     NEWTYPE1 TYPE OF ORGANIZATION-LONG/
               NEWTYPE2 TYPE OF ORGANIZATION-SHORT
IF             (RCID3 EQ 11010 OR 11020 OR 11030 OR 12020 OR 12030 OR
                13010 OR 13030 OR 13040 OR 14010 OR 14020 OR 14030
                OR 14040 OR 15010 OR 15020 OR 15030 OR 15040)
               RCTYPE1 = 1

IF             (RCID3 EQ 12010) RCTYPE1 = 2

IF             (RCORGTYP EQ 1 OR (RCID3 EQ 31230 OR 31330 OR 43290 OR
                55140))
               RCTYPE1 = 3

IF             (RCORGTYP EQ 2 OR (RCID3 EQ 22420 OR 44080)) RCTYPE1 = 4

IF             (RCID3 EQ 24211 OR 24440 OR 41140 OR 42130 OR 42240 OR
                44201 OR 44420 OR 25450)
               RCTYPE1 = 5

IF             (RCORGTYP EQ 3 OR (RCID3 EQ 21140 OR 42350)) RCTYPE1 = 6

IF             (RCID3 EQ 33140 OR 51200 OR 64060) RCTYPE1 = 7

IF             (RCID3 EQ 21160 OR 22180 OR 23160 OR 43160 OR 52090 OR
                54110 OR 62040 OR 42140)
               RCTYPE1 = 8

IF             (RCORGTYP EQ 8) RCTYPE1 = 9

IF             (RCORGTYP EQ 9) RCTYPE1 = 10

IF             (RCORGTYP EQ 10 OR (RCID3 EQ 44110)) RCTYPE1 = 11

IF              (RCORGTYP EQ 6) RCTYPE1 = 12

IF              (RCORGTYP EQ 5) RCTYPE1 = 13

IF              (RCORGTYP EQ 4) RCTYPE1 = 14

IF              (RCORGTYP EQ 11 OR (RCID3 EQ 34290)) RCTYPE1 = 15

IF              (RCORGTYP EQ 12 OR (RCID3 EQ 24200 OR 21240)) RCTYPE1=16

IF              (RCORGTYP EQ 13 OR (RCID3 EQ 72040)) RCTYPE1 = 17

IF              (RCORGTYP EQ 14 AND RCID3 EQ 21330 OR 22200 OR 23320 OR
                 24070 OR 24350 OR 25140 OR 25240 OR 25440 OR 31500
                 OR 34200 OR 34260 OR 35180 OR 41080 OR 42160 OR
                 42440 OR 43010 OR 44280 OR 45360 OR 45400 OR 61080
                 OR 63030 OR 73080)
                RCTYPE1 = 18

VALUE LABELS    RCTYPE1 (1)ERIC CLRHSES (2)ERIC FACILITY
                 (3)CAMPUS MAIN LIB (4)CAMPUS DEPT LIB
                 (5)CAMPUS OTH ORG (6)STATE ED AGCY (7)STATE LIB
                 (8)FEDERAL LIB (9)OTHER FED CHSE (10)NIE LAB OR CTR
                 (11)INTERM SRVC PROV (12)SCH DIST R&D CTR
                 (13)SCH LIB DISTRICT (14)SCH LIB LOCAL
                 (15)PUBLIC LIBRARY (16)SOCIETY OR ASSOC
                 (17)BUSINESS OR CORP (18)OTHER

IF              (RCTYPE1 EQ 1 OR 2) RCTYPE2 = 1

IF              (RCTYPE1 EQ 3 OR 4 OR 5) RCTYPE2 = 2

IF              (RCTYPE1 EQ 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13
                 OR 14 OR 15 OR 16 OR 17 OR 18)
                RCTYPE2 = 3

VALUE LABELS    RCTYPE2 (1)ERIC CLHSE & FAC (2)ACADEMIC ACC PTS
                 (3)OTHER ACC PTS

VAR LABELS      RCTYPE1 TYPE OF ORGANIZATION-LONG/
                RCTYPE2 TYPE OF ORGANIZATION-SHORT

IF              ((Q3P1 LT 888) AND (Q3P2 LT 88))
                HOURS=(Q3P1+(Q3P2/60))
IF              ((Q3P1 GE 888) AND (Q3P2 GE 88))
                HOURS=999
MISSING VALUES  HOURS(999)
VAR LABELS      HOURS HOURS
VALUE LABELS    HOURS (999)DONT KNOW OR NO RESPONSE

IF              ((Q7A GT 0 AND LT 777) AND (Q7B GE 0 AND Q7B LT 777))
                PROP1=(Q7B/Q7A)
IF              (Q7A EQ 0 OR Q7A GE 777 OR Q7B GE 777)
                PROP1=999
MISSING VALUES  PROP1(999)
VAR LABELS      PROP1 RATIO DOCS TO # OF DOCS
VALUE LABELS    PROP1 (999)NA-DK-NR
IF              ((Q7B GT 0 AND Q7B LT 777) AND (Q7C GE 0 AND Q7C LT
                 777)) PROP2=(Q7C/Q7B)
IF              (Q7B EQ 0 OR Q7B GE 777 OR Q7C GE 777)
```

```
                          PROP2=999
          MISSING VALUES PROP2(999)
          VAR LABELS      PROP2 RATIO RELEV DOCS TO # DOCS
          VALUE LABELS    PROP2 (999)NA-DK-NR

          FREQUENCIES     GENERAL=ALL

          SAVE FILE       RQTRCOP1

          FINISH
```

APPENDIX E

EDUCATION POPULATION SURVEY

DESCRIPTION OF METHODS

E.1 Description of Sample

The purpose of the Education Population Survey was to measure the use and awareness of ERIC via a mail questionnaire survey among members of the U.S. educational community in general. The ability to do this was dependent upon the ability to construct a sample which could be chosen with known probability from a specific population so that survey responses could be projected back to that population. Table E.1 shows how the sample was constructed.

With the cooperation of NIE staff, decisions were made concerning the specific educational communities which would be studied. These categories are listed in column 1 of Table E.1.

In column 2 under "original estimate" are listed our initial estimates of the population sizes in each of these categories. These are drawn from data supplied by NCES and data drawn from the Educational Information Market Study. Altogether, these estimates produce a total of 2,748,239 individuals in the U.S. educational community.

In column 2 are given the list sizes produced by the Educational Directory, a firm which specializes in updating and selling mailing lists of individuals within the U.S. educational community. Here we see that the coverage of Practitioners is substantially less in the Educational Directory for Practitioners than in the NCES estimates, 2,647,339 vs. 1,626,487. After discussions with Educational Directory staff, we determined that the reason for this discrepancy was due both to (1) under-reporting because of the difficulty of collecting individual teachers' names and addresses, and (2) differences in definitions within some categories (e.g., the Educational Directory includes some non-instructional staff with various teacher categories).

Table E.1 Description of Education Population Survey Sample

1. Population Category	2. Original Estimate	3. Est. Used for Weighting	4. Sample	5. Response	6. Weighting Factor
Practitioners					
Teachers	2.4 million[1]	1,512,800[4]	400	122	12,400
Principals	104,679[1]	79,415[4]	100	35	2,269
School Librarians, other	142,660[1]	34,272[4,5]	100	34	1,008
	2,647,339	1,626,487	600	191	—
Administrators					
School District Staff	65,000[2]	123,538[4,6]	100	38	3,251
Intermediate Agency	3,400[2]	—	—	—	—
State Education Staff	9,500[2]	6,968[4,6]	100	67	104
	77,900	130,506	200	105	—
Academics & Consultants					
Dept. of Ed. Deans	23,000[2,3]	1,702[4]	50	23	74
Dept. of Ed. Faculty		39,996[4]	100	44	909
Ed. Consultants	—	1,989[4]	50	13	153
	23,000	43,687	200	80	—
Grand Totals	2,748,239	1,800,680	1,000	376[7]	—

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Education Population Survey, 1981.

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[1] Figures taken from NCES Projections of Educational Statistics for 1980.

[2] Figures taken from The Educational Information Market Study, Study of Information Requirements in Education (ED 135411).

[3] Includes both faculty and deans of depts. of Education.

[4] Figures published by Educational Directory, the source of mailing lists used for sample development.

[5] Includes school librarians only.

[6] Includes intermediate agency staff.

[7] Mail-out date was April 14, 1981. One mail reminder was sent to non-respondents in May 1981. Receipt of questionnaires was closed on June 25, 1981.

For Administrators and Academics & Consultants, however, the Educational Directory lists more names and addresses than the Educational Information Market Study used for the estimates presented here. In addition, the Educational Directory's categories for School District Staff and State Education staff include intermediate agency staff.

We decided that, since the Educational Directory does provide the single most complete listing of educators in the U.S., that it would be used as the basis for the sample used in the Education Population Survey.[1] However, the problem arose as to which population the survey results should be projected; the NCES/Educational Information Market Study population, or the Educational Directory population? We opted for the latter, based on the following reasoning:

1. Given that the definitions and categories used by the Educational Directory may be somewhat different than those used by the NCES, projecting to the NCES population may not be justified.

2. Even though this results in an apparent underestimate in the Practitioner population size, Practitioners are still the major population category studied, and their responses are still weighted more highly than the other two population categories.

Dividing the estimated population size (column 3) by the responses received in each category (column 5) yielded the weighting factors used to project survey responses up to the population total of 1,800,680. (The reader should note that this is only the "educational community" in the U.S.; it does not completely reflect the potential user population for ERIC since (1) students were not explicitly sampled, and (2) a substantial market exists for ERIC outside the educational community among, for example, individuals working in related fields such as clinical and social psychology, social work, demographics and epidemiology, public administration, and other fields.

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[1] In actuality, more than a dozen separate lists were purchased, each with the specified minimum of 1,000 names per list; these were subsequently sub-sampled to provide the desired sample size.

Due to the above caveats, we suggest that our estimates of the size of the U.S. educational community and ERIC market be interpreted as conservative estimates.

E.2 The Questionnaire

The questionnaire used in the Education Population Survey is displayed on the following pages. It is divided into the following sections:

Questions 1-3	Awareness and use of ERIC in general
Questions 4-15	Questions about the ERIC product or service used most recently
Questions 16-20	Demographics (employer type, age, income, etc.)

The reader should note that there is substantial similarity between this questionnaire and the Requestor Population Survey questionnaire. This was done so that responses from both questionnaires could be compared.

UNITED STATES DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
WASHINGTON, D.C. 20208

April 14, 1981

Dear Educator:

The National Institute of Education of the U.S. Department of Education has contracted with King Research, Inc. to conduct a study of the Educational Resources Information Center (ERIC). With central guidance and financial assistance from the NIE, ERIC offers information about the research and practice literature of education through a host of products and services that include Resources in Education, Current Index to Journals in Education, ERIC papercopy and microfiche reports, the ERIC computerized database, and a formal network of 16 ERIC Clearinghouses. The study has been designed to gather information about costs associated with the production and distribution of ERIC products and services as well as information about the people such products and services are reaching.

A voluntary national survey of persons from the education community is being conducted as part of the study. You have been selected randomly as a representative from a subcommunity of persons ERIC is intended to serve. Since there were only 1,000 names selected for the entire survey, your response to the enclosed questionnaire is very important. The information you provide will be reported only in summary form and individuals' names will not be associated with specific responses; it is King Research's policy not to reveal the names of survey respondents to anyone other than the staff members who are responsible for conducting the survey.

The completed questionnaire should be returned to King Research, Inc. in the enclosed postage-paid return envelope. If you have any questions about the survey, please call Ms. Colleen Schell, Survey Director, King Research, Inc. at (301) 881-6766, collect.

Thank you for your cooperation.

Dennis McDonald

Dennis McDonald, Ph.D.
Project Director
King Research, Inc.

Joseph Heinmiller, Ed.D.
Project Officer
National Institute of Education
Research and Educational Practice Unit

P.S. Please complete and return this questionnaire by May 1, 1981.

U.S. DEPARTMENT OF EDUCATION

FORM APPROVED
FEDAC No. S223
Approval Expires:
May 31, 1981
I.D. Number:

____

This study is being conducted by King Research, Inc. under contract with the National Institute of Education.

ERIC COST AND USAGE STUDY
EDUCATIONAL POPULATION SURVEY

PLEASE READ THE FOLLOWING INSTRUCTIONS BEFORE BEGINNING THE QUESTIONNAIRE:

For most questions in this questionnaire, you will circle a number next to a category which most closely corresponds to your response. For a few questions you will be asked to write in your response.

Not all questions will apply to you. Therefore, please follow any instructions noted within the context of a question. These instructions will appear in parentheses ( ).

PLEASE NOTE: There are many types of information products and services, such as indexes, computerized databases, bibliographies, etc. Throughout this questionnaire, we will be concerned primarily with those information products and services which are provided by the Educational Resources Information Center (ERIC).

Q1

1. Prior to receiving this cover letter and questionnaire, had you ever heard of the Educational Resources Information Center (ERIC)? *(CIRCLE 1, 2, OR 3.)*

Start here

Yes	1
No	2
Not Sure	3

ED 215 C

This report is authorized by legislation (20 U.S.C. 1221e). While you are not required to respond, your cooperation is needed to make the results of the survey accurate and timely.

Have you ever used or obtained any of the following types of ERIC information products or services to obtain information for yourself or for someone else? *(CIRCLE 1 IF YOU ARE NOT AWARE OF THE ERIC PRODUCT OR SERVICE, 2 IF YOU ARE AWARE OF IT BUT HAVE NEVER USED IT, 3 IF YOU HAVE USED IT DURING THE PAST 4 WEEKS, 4 IF YOU HAVE USED IT DURING THE PAST 12 MONTHS, 5 IF YOU USED IT OVER 12 MONTHS AGO, AND 6 IF YOU USED IT BUT DON'T REMEMBER WHEN.)*

Product or Service	Not Aware	Aware but Never Used	Used During Past 4 Weeks	Used During Past 12 Months	Used Over 12 Months Ago	Used But Don't Remember When
1) RIE (Resources in Education, a monthly ERIC journal which abstracts and indexes the educational report literature)	1	2	3	4	5	6
2) CIJE (Current Index to Journals in Education, a monthly ERIC journal which covers the educational periodical literature)	1	2	3	4	5	6
3) Computer Searching of ERIC (Computerized searching of the ERIC bibliographic database, often conducted through use of a terminal interacting via telephone with a computer, or conducted by grouping several requests together for submission at one time to a computer)	1	2	3	4	5	6
4) ERIC Microfiche (pages photographically reduced to fit on an index-card-sized piece of film, requiring use of a magnifying or projection device to read)	1	2	3	4	5	6
5) ERIC Printed Report (Any report produced or supplied by any ERIC organization, which is printed on paper, usually with an "ED" identifying number)	1	2	3	4	5	6
6) ERIC Printed Bibliography (Any list of bibliographic references, other than computer printouts from an outline or batch search of the ERIC database, which is produced and distributed on paper by any ERIC organization;	1	2	3	4	5	6
7) ERIC Referral Services (The provision by any ERIC organization of names of programs, individuals, or organizations which can be contacted by the requestor for additional information. Referral services are often provided in person, by phone, or by letter, instead of through distribution of previously-produced printed reports, documents, or bibliographies)	1	2	3	4	5	6
) Other (Any other ERIC product or service not included above. Please describe.) __________________ __________________ __________________	1	2	3	4	5	6

NOTE: IF YOU CIRCLED "3", "4", "5", OR "6" FOR ANY OF THE ERIC PRODUCTS OR SERVICES IN QUESTION 3, PLEASE CONTINUE WITH QUESTION 4. OTHERWISE, PLEASE SKIP TO QUESTION 16.

4. Which type of ERIC product or service from Question 3 did you use or obtain most recently? *(PLEASE INSERT THE NAME OF THE PRODUCT OR SERVICE USED MOST RECENTLY. IF YOU USED SEVERAL ERIC PRODUCTS OR SERVICES AT THE SAME TIME, CHOOSE THE ONE WHICH YOU SPENT THE MOST TIME USING.)* ____________________ ☐

5. Briefly, please describe the question, problem, or information need which lead you to use or obtain this ERIC product or service:

____

____

____

____

6. How did you first find out that this type of ERIC product or service existed? *(PLEASE CIRCLE THE CODE NUMBER OF THE MOST APPROPRIATE RESPONSE. PLEASE CIRCLE ONLY ONE NUMBER.)*

From a teacher, professor, or employer	01
From a friend, colleague, or fellow student	02
From the staff at a library, media center, A/V department, information center, or clearinghouse	03
Found out about it by myself while doing research in a library, media center, A/V department, information center, or clearinghouse	04
Read about it in a book, report, or other document	05
Received a notice or advertisement about it in the mail	06
Saw it described in a poster at or near my place of employment or study .	07
Heard about it at a professional conference	08
Read about it in a journal, magazine, or newsletter	09
I don't remember	10
Other (describe): ____________________ ____________________	11

7. When you used or obtained this ERIC product or service, did you have specific authors or documents in mind, or were you searching for information on a specific topic without having specific authors or documents in mind? *(PLEASE CIRCLE THE CODE NUMBER OF THE MOST APPROPRIATE RESPONSE.)*

I had specific authors or documents in mind	1
I was searching for information on a specific topic	2
Both of the above	3
Neither of the above (please describe): ____________________ ____________________ ____________________	4

8. Where did you obtain physical access to this ERIC product or service so that you could actually read or examine it? *(PLEASE CIRCLE THE CODE NUMBER OF THE MOST APPROPRIATE RESPONSE.)*

I did not obtain physical access to a product or service which could be read or examined 1

From a teacher, professor, or employer 2

From a friend, colleague, or fellow student 3

From a library, media center, A/V department, information center, or non-ERIC clearinghouse 4

From an ERIC Clearinghouse, the ERIC Facility, or from the ERIC Document Reproduction Service (EDRS) 5

I don't remember 6

Other (please describe): ______________________________

______________________________ 7

9. Which of the following categories best describe how you used or applied (or intended to use or apply) the information obtained from the ERIC product or service you used or obtained most recently? *(CIRCLE CODE NUMBERS OF ALL THAT APPLY.)*

To support the teaching, training, or guidance of my own or someone else's students 1

To support my study in a class I was taking 2

To support my own research project 3

To help plan, manage, administer or evaluate an organization's activities (e.g., a school, school district, state agency, or other organization) 4

I did not intend to use or apply the information myself since I was obtaining it for someone else's use 5

I don't remember 6

Other (please describe): ______________________________

______________________________ 7

10. Overall, how satisfied were you with the information you obtained from the ERIC product or service which you used most recently? *(CIRCLE CODE NUMBER OF THE MOST APPROPRIATE RESPONSE.)*

Highly satisfied 1

Somewhat satisfied 2

Neither satisfied nor dissatisfied 3

Somewhat dissatisfied 4

Highly dissatisfied 5

11. Did the information which you obtained from that ERIC product or service help you to identify any other information sources or documents which you found to be useful or relevant to the question, problem, or information need you identified in question #5? *(CIRCLE 1, 2, 3, OR 4.)*

Yes . . . . 1 *(continue with Q#12a)*

No 2

Don't Know . . . . 3 *(skip to Q#14)*

Don't Remember 4

12a. Please circle the code numbers corresponding to those additional information sources which you identified from the ERIC product or service you used or obtained most recently. *(CIRCLE CODE NUMBERS OF ALL THAT APPLY.)*

Names of individuals who could be contacted for additional information. . . 1

Names of organizations which could be contacted for further information . . 2

Titles of documents (e.g., reports, articles, books, etc.) 3

Names of programs or projects (e.g., demonstration projects, research projects, etc.) 4

Other sources of additional useful or relevant information (please describe): ______________________

____

____

______________________ . . . 5

12b. NOTE: If you circled "3", approximately how many documents did you identify which were useful or relevant to the question, problem, or information need you identified in question #5? *(INSERT NUMBER IN BOX; USE "0" FOR "NONE" AND "DK" FOR "DON'T KNOW" OR "DON'T REMEMBER".)*

☐ documents

13. If you identified titles of any useful or relevant documents (response #3 to question 12a), have you been able to obtain access to these documents so that you could read or examine them? *(CIRCLE CODE NUMBER OF MOST APPROPRIATE RESPONSE.)*

No relevant documents were identified 1

I did not need to obtain access to these documents 2

I have not yet tried to obtain access to the identified documents 3

Have obtained access to none of the documents even though I have tried . 4

Have obtained access to some of the documents 5

Have obtained access to most of the documents 6

Have obtained access to all of the documents 7

Other (please describe): ______________________

______________________ 8

14. During the past six months, approximately how many other times have you had questions, problems, or information needs which lead to your using or obtaining the type of ERIC product or service you used most recently? *(INSERT NUMBER IN BOX, ZERO (0) IF NONE.)* . . . . ☐ times

15. Based on your past experience, would you use the type of ERIC product or service (which you used most recently) in the future? *(CIRCLE 1 OR 2.)*

Yes 1

No 2

16. Finally, a few questions for statistical purposes only ... What is your age?

Under 25	
25 to 34	2
35 to 44	3
45 to 54	4
55 to 64	5
65 and over	6

17. What is the highest degree you have obtained?

High school diploma or less	1
Associate degree	2
Bachelor's degree	3
Master's degree	4
Master's degree plus postgraduate coursework	5
Doctorate	6
Law or Medical degree	7
Other (please describe): ____________________ ______________________________	8

18. Which of the following categories best describes your current employer or primary affiliation? *(CIRCLE ONE ONLY.)*

Junior college or two year college	01
Four year college or university	02
State education agency	03
Other state government agency	04
Local school district	05
Local government agency	06
Elementary school	07
Secondary school	08
Federal government agency	09
Society or association	10
Research firm	11
Consulting firm	12
Private business or corporation	13
Other (please describe): ____________________ ______________________________	14
Not employed by or affiliated with any organization	15

19. To which of the following job- or school-related functions do you regularly devote the largest proportion of your time? *(CIRCLE THE CODE NUMBER OF THE MOST APPROPRIATE RESPONSE.)*

Administration, supervision, management, or planning	1
Research or evaluation	2
Teaching, training, or counseling	3
Information support (e.g., librarian, information specialist)	4
Student	5
Other (please give job title and function): ______________________	6

20. For statistical purposes only, which of the following categories describe your total income (before taxes) for 1980? Include your income only. Do not include the income of other immediate family members who are living with you. *(CIRCLE ONE NUMBER.)*

$35,000 or more	01
$30,000 but less than $35,000	02
$25,000 but less than $30,000	03
$20,000 but less than $25,000	04
$15,000 but less than $20,000	05
$10,000 but less than $15,000	06
$5,000 but less than $10,000	07
Under $5,000	08
No income	09
Prefer not to answer	10

THANK YOU! PLEASE RETURN THIS QUESTIONNAIRE TO THE ADDRESS AT THE RIGHT IN THE ENCLOSED, POST-PAID ENVELOPE.

KING RESEARCH, INC.
P.O. BOX 71
ROCKVILLE, MD 20850

E.3 Description of Education Population Survey Database

The following pages list the structure of the SPSS file used for data analysis.

```
//  JOB (M516,9309),LEVITZ,CLASS=Q
/*NOSETUP
//*COMMENT    RUN TO SAVE EDUCATION POPULATION WITH RECODED VARIBLES
//PROCLIB DD DSN=CCIAPP.PROCLIB,DISP=SHR
//  EXEC SPSS
//FT04F001 DD UNIT=3350,DSN=WYL.H2KRI1.ERICEDP2,
//  DISP=(OLD),
//  SPACE=(TRK,(20,10),RLSE),DCB=BLKSIZE=6200,VOL=SER=TS01
//FT08F001 DD DSN=WYL.H2KRI1.ERICEPOP,DISP=(OLD,KEEP),
//  UNIT=3350,VOL=SER=TS01,
//  DCB=(RECFM=FB,LRECL=80,BLKSIZE=720)
//SYSIN DD *
NUMBERED        YES
RUN NAME        EDUCATIONAL POPULATION RECODED
DATA LIST       FIXED (1) /1 POPTYPE1 1
                SERNUM 2-4
                IDNUM 1-4
                Q1  5
                Q2P1,Q2P2,Q2P3,Q2P4,Q2P5,Q2P6,Q2P7,Q2P8,Q2P9,Q2P10,
                Q2P11,Q2P12,Q2P13,Q2P14,Q2P15,Q2P16,Q2P17,Q2P18 6-23
                RQ2P1,RQ2P2,RQ2P3,RQ2P4,RQ2P5,RQ2P6,RQ2P7,RQ2P8,
                RQ2P9,RQ2P10,RQ2P11,RQ2P12,RQ2P13,RQ2P14,RQ2P15,
                RQ2P16,RQ2P17,RQ2P18 6-23
                Q3P1,Q3P2,Q3P3,Q3P4,Q3P5,Q3P6,Q3P7,Q3P8 24-31
                RQ3P1,RQ3P2,RQ3P3,RQ3P4,RQ3P5,RQ3P6,RQ3P7,RQ3P8 24-31
                Q4  32-33
                RQ4  32-33
                ERICUSER 32-33
                Q6  34-35
                RQ6  34-35
                Q7  36
                Q8  37-38
                Q9P1,Q9P2,Q9P3,Q9P4,Q9P5,Q9P6,Q9P7  39-45
                Q10  46
                Q11  47
                Q12AP1,Q12AP2,Q12AP3,Q12AP4,Q12AP5  48-52
                Q12B  53-55
                RQ12B  53-55
                Q13  56-57
                Q14  58-60
                RQ14  58-60
                Q15  61
                Q16  62
                RQ16  62
                Q17  63
                RQ17  63
                Q18  64-65
                RQ18  64-65
                Q19  66
                RQ19  66
                Q20  67-68
                RQ20  67-68

INPUT MEDIUM    TAPE
N OF CASES      UNKNOWN

MISSING VALUES Q2P1 TO Q2P18  (9)/
                Q3P1 TO Q3P8  (9)/
                Q4  (77,88,99)/
                Q6  (77,88,99)/
```

```
                      Q7  (7,8,9)/
                      Q8  (77,88,99)/
                      Q9P1 TO Q9P7 (7,8,9)/
                      Q10  (7,8,9)/
                      Q11  (7,9)/
                      Q12AP1 TO Q12AP5 (7,8,9)/
                      Q12B (777,888,999)/
                      Q13  (77,88,99)/
                      Q14  (777,888,999)/
                      Q15  (7,8,9)/
                      Q16 TO Q17  (9)/
                      Q18 (99)/
                      Q19 (9)/
                      Q20 (99)

          VAR LABELS  POPTYPE1 POPULATION CATEGORY-LONG VERSION/
                      SERNUM ID NUMBER/
                      Q1 HAD YOU HEARD OF ERIC BEFORE?/
                      Q2P1 ADULT, CAREER & VOCATIONAL EDUCATION/
                      Q2P2 COUNSELING & PERSONNEL SERVICES/
                      Q2P3 EDUCATIONAL MANAGEMENT/
                      Q2P4 ELEMENTARY & EARLY CHILDHOOD EDUCATION/
                      Q2P5 HANDICAPPED & GIFTED CHILDREN/
                      Q2P6 HIGHER EDUCATION/
                      Q2P7 INFORMATION RESOURCES/
                      Q2P8 JUNIOR COLLEGES/
                      Q2P9 LANGUAGES & LINGUISTICS/
                      Q2P10 READING & COMMUNICATION SKILLS/
                      Q2P11 RURAL EDUCATION & SMALL SCHOOLS/
                      Q2P12 SCIENCE, MATH & ENVIRONMENTAL EDUCATION/
                      Q2P13 SOCIAL STUDIES, SOCIAL SCIENCES EDUCATN/
                      Q2P14 TEACHER EDUCATION/
                      Q2P15 TESTS, MEASUREMENTS & EVALUATION/
                      Q2P16 URBAN EDUCATION/
                      Q2P17 ERIC PROCESSING & REFERENCE/
                      Q2P18 ERIC DOCUMENT REPRODUCTION SERVICE/
                      Q3P1 RIE/
                      Q3P2 CIJE/
                      Q3P3 COMPUTER SEARCHING OF ERIC/
                      Q3P4 ERIC MICROFICHE/
                      Q3P5 ERIC PRINTED REPORT/
                      Q3P6 ERIC PRINTED BIBLIOGRAPHY/
                      Q3P7 ERIC REFERRAL SERVICE/
                      Q3P8 OTHER/
                      Q4 TYPE OF ERIC SERVICE USED RECENTLY/
                      Q6 HOW DID YOU FIRST LEARN OF ERIC?/
                      Q7 WHAT WERE YOU SEARCHING FOR?/
                      Q8 WHERE DID YOU OBTAIN ACCESS TO ERIC?/
                      Q9P1 SUPPORT TEACHING OF STUDENTS/
                      Q9P2 SUPPORT OWN CLASS STUDIES/
                      Q9P3 SUPPORT SELF RESEARCH PROJECT/
                      Q9P4 TO MANAGE OR EVALUATE ACTIVITIES/
                      Q9P5 OBTAIN INFORMATION FOR SOMEONE ELSE/
                      Q9P6 DON'T REMEMBER/
                      Q9P7 OTHER/
                      Q10 SATISFACTION/
                      Q11 DID INFORMATION LEAD TO OTHER SOURCES?/
                      Q12AP1 INDIVIDUALS/
                      Q12AP2 ORGANIZATIONS/
                      Q12AP3 DOCUMENTS/
                      Q12AP4 PROGRAMS OR PROJECTS/
```

```
                     Q12AP5 OTHER/
                     Q12B HOW MANY DOCUMENTS?/
                     Q13 ABLE TO OBTAIN ACCESS TO DOCUMENTS?/
                     Q14 OTHER TIMES YOU HAD QUESTIONS/
                     Q15 WOULD YOU USE SAME SERVICES AGAIN?/
                     Q16 AGE/
                     Q17 DEGREE/
                     Q18 CURRENT EMPLOYER/
                     Q19 PRIMARY JOB FUNCTION/
                     Q20 INCOME CATEGORY BEFORE TAXES/

        VALUE LABELS POPTYPE1 (1)TEACHERS  (2)PRINCIPALS
                     (3)SCHOOL LIBRARIANS  (4)SCHOOL DISTRICT STAFF
                     (5)STATE EDUCATION STAFF
                     (6)ACADEMIC DEPT. HEADS IN EDUCATION
                     (7)FACULTIES OF ED. DEPTS
                     (8)EDUCATION CONSULTANTS/
                     Q1 (1)YES  (2)NO  (3)NOT SURE/
                     Q2P1 TO Q2P18  (1)NOT AWARE
                     (2)AWARE BUT NO CONTACT
                     (3)CONTACT IN PAST 4 MO
                     (4)CONTACT IN PAST 12 M
                     (5)CONTACT OVER 12 MO
                     (6)CONTACT DON'T REM WN/
                     Q3P1 TO Q3P8  (1)NOT AWARE
                     (2)AWARE BUT NEVER USED
                     (3)USED IN PAST 4 MONTHS
                     (4)USED IN PAST 12 MNTHS
                     (5)USED OVER 12 MONTHS AGO
                     (6)USED DON'T REMEM WHEN/
                     Q4  (1)RIE  (2)CIJE
                     (3)ERIC COMPUTER SEARH
                     (4)ERIC MICROFICHE
                     (5)ERIC PRINTED REPORT
                     (6)ERIC PRINTED BIBLIOGRAPHY
                     (7)ERIC REFERRAL SERVICES
                     (8)OTHER/
                     Q6  (1)TEACHER OR EMPLOYER
                     (2)FRIEND  (3)LIBRARY, ETC. STAFF
                     (4)SELF SEARCH  (5)BOOK, REPORT OR DOCUMENT
                     (6)MAIL AD  (7)POSTER AD AT JOB
                     (8)PROFESSIONAL CONFERENCE
                     (9)JOURNAL, MAGAZINE
                     (10)DON'T REMEMBER
                     (11)OTHER/
                     Q7  (1)SPEC AUTHORS OR DOCUMENTS
                     (2)INFORM ON SPEC TOPIC
                     (3)BOTH   (4)NEITHER/
                     Q8  (1)DID NOT OBTAIN ACCESS
                     (2)FROM TEACHER OR EMPLOYER
                     (3)FROM FRIEND  (4)LIBRARY, ETC.
                     (5)FROM ERIC
                     (6)DON'T REMEMBER  (7)OTHER/
                     Q9P1 TO Q9P7  (1)YES  (2)NO/
                     Q10 (1)HIGHLY SATISFIED
                     (2)SOMEWHAT SATISFIED  (3)NEITHER
                     (4)SOMEWHAT DISSATISFIED
                     (5)HIGHLY DISSATISFIED/
                     Q11 (1)YES  (2)NO  (3)DON'T KNOW
                     (4)DON'T REMEMBER/
                     Q12AP1 TO Q12AP5  (1)YES  (2)NO/
```

```
                Q13  (1)NO DOCUMENTS IDENTIFIED
                (2)NO NEED FOR DOCUMENTS
                (3)NOT YET TRIED TO ACCESS  (4)ACCESSED NONE
                (5)ACCESSED SOME  (6)ACCESSED MOST
                (7)ACCESSED ALL  (8)OTHER/
                Q15  (1)YES  (2)NO/
                Q16  (1)UNDER 25  (2)25 TO 34
                (3)35 TO 44  (4)45 TO 54  (5)55 TO 64
                (6)65 AND OVER/
                Q17  (1)HIGH SCHOOL DIPLOMA OR LESS
                (2)ASSOCIATE DEGREE  (3)BACHELOR'S DEGREE
                (4)MASTER'S DEGREE  (5)MASTER'S + PSTGRD WK
                (6)DOCTORATE  (7)LAW OR MEDICAL DEGREE  (8)OTHER/
                Q18  (1)JR OR 2 YEAR COLLEGE
                (2)UNIVERSITY OR 4 YEAR COLLEGE
                (3)STATE EDUCATION AGENCY
                (4)OTHER STATE GOVERNMENT AGENCY
                (5)LOCAL SCHOOL DISTRICT
                (6)LOCAL GOVERNMENT AGENCY
                (7)ELEMENTARY SCHOOL  (8)SECONDARY SCHOOL
                (9)FEDERAL GOVERNMENT AGENCY
                (10)SOCIETY OR ASSOCIATION
                (11)RESEARCH FIRM  (12)CONSULTING FIRM
                (13)PRIVATE BUSINESS
                (14)OTHER  (15)NOT EMPLOYED/
                Q19  (1)ADMINISTRATION
                (2)RESEARCH OR EVALUATION
                (3)TEACHING OR COUNSELING
                (4)INFORMATION SUPPORT  (5)STUDENT
                (6)OTHER/
                Q20  (1)$35,000 OR MORE
                (2)$30,000 TO $34,999  (3)$25,000 TO $29,999
                (4)$20,000 TO $24,999  (5)$15,000 TO $19,999
                (6)$10,000 TO $14,999  (7)$5,000 TO $9,999
                (8)UNDER $5,000  (9)NO INCOME  (10)PREFER NO ANSWER/

ALLOCATE        TRANSPACE=30000

IF              (POPTYPE1 EQ 1) EDWEIGHT=12400
IF              (POPTYPE1 EQ 2) EDWEIGHT=2269
IF              (POPTYPE1 EQ 3) EDWEIGHT=1008
IF              (POPTYPE1 EQ 4) EDWEIGHT=3251
IF              (POPTYPE1 EQ 5) EDWEIGHT=104
IF              (POPTYPE1 EQ 6) EDWEIGHT=74
IF              (POPTYPE1 EQ 7) EDWEIGHT=909
IF              (POPTYPE1 EQ 8) EDWEIGHT=153

IF              (POPTYPE1 EQ 1 OR 2 OR 3) POPTYPE2=1
IF              (POPTYPE1 EQ 4 OR 5) POPTYPE2=2
IF              (POPTYPE1 EQ 6 OR 7 OR 8) POPTYPE2=3

VAR LABELS      POPTYPE2 POPULATION CATEGORY-SHORT VERSION/
VALUE LABELS    POPTYPE2 (1)PRACTITIONERS (2)ADMINISTRATORS
                         (3)ACADEMICS & CONSULTANTS/

RECODE          RQ4 (1=1) (2=2) (3=3) (4=4) (5,6=5)
                    (7,8=6) (88,99=8) (77=7)/
                RQ2P1 TO RQ2P18 (1=1) (2=2) (3 THRU 6=3)
                                (9=9)/
                RQ3P1 TO RQ3P8 (1=1) (2=2) (3 THRU 6=3) (9=9)/
                ERICUSER (77=2) (ELSE=1)/
```

```
                    RQ12B (1 THRU 5=1) (6 THRU 10=2) (11 THRU 20=3)
                          (777=7) (888=8) (999=9) (ELSE=4)/
                    RQ14 (0=1) (1,2=2) (3,4,5=3) (777=7)
                          (888=8) (999=9) (ELSE=4)/
                    RQ16 (1,2=1) (3=2) (4=3) (5,6=4) (9=9)/
                    RQ17 (1,2=1) (3=2) (4=3) (5=4) (6=5) (8,9=6)/
                    RQ18 (1,2=1) (3,4=2) (5=3) (7=4) (8=5)
                          (6,11 THRU 14,99=6)/
                    RQ19 (1=1) (2=2) (3=3) (4=4) (5=5) (6,9=6)/
                    RQ20 (1=1) (2=2) (3=3) (4=4) (5=5) (6=6)
                          (7=7) (8=8) (10,99=9)/
                    RQ6 (1=1) (2=2) (3=3) (4=4) (5 THRU 11=5) (77=7)
                         (99=9)

     MISSING VALUES RQ4 (7)/
                    RQ6  (7,9)/
                    RQ2P1 TO RQ2P18 (9)/
                    RQ3P1 TO RQ3P8 (9)/
                    RQ12B (7,9)/
                    RQ14 (7,8,9)/
                    RQ16 (9)

     VAR LABELS     RQ2P1 ADULT, CAREER & VOCATNL EDUCATN, RECODED/
                    RQ2P2 COUNSELING & PERSONNEL SERVICES, RECODED/
                    RQ2P3 EDUCATIONAL MANAGEMENT, RECODED/
                    RQ2P4 ELEMENTARY & EARLY CHILDHD EDUCTN, RECODE/
                    RQ2P5 HANDICAPPED & GIFTED CHILDREN, RECODED/
                    RQ2P6 HIGHER EDUCATION, RECODED/
                    RQ2P7 INFORMATION RESOURCES, RECODED/
                    RQ2P8 JUNIOR COLLEGES, RECODED/
                    RQ2P9 LANGUAGES & LINGUISTICS, RECODED/
                    RQ2P10 READING & COMMUNICATION SKILLS, RECODED/
                    RQ2P11 RURAL EDUCATION & SMALL SCHOOLS, RECODED/
                    RQ2P12 SCIENCE, MATH & ENVIRMNTL EDCTN, RECODED/
                    RQ2P13 SOCIAL STUDIES, SOCL SCI EDUCTN, RECODED/
                    RQ2P14 TEACHER EDUCATION, RECODED/
                    RQ2P15 TESTS, MEASUREMENTS & EVALUATN, RECODED/
                    RQ2P16 URBAN EDUCATION, RECODED/
                    RQ2P17 ERIC PROCESSING & REFERENCE, RECODED/
                    RQ2P18 ERIC DOCUMNT REPRODUCTN SERVICE, RECODED/
                    RQ3P1 RIE, RECODED/
                    RQ3P2 CIJE, RECODED/
                    RQ3P3 COMPUTER SEARCHING OF ERIC, RECODED/
                    RQ3P4 ERIC MICROFICHE, RECODED/
                    RQ3P5 ERIC PRINTED REPORT, RECODED/
                    RQ3P6 ERIC PRINTED BIBLIOGRAPHY, RECODED/
                    RQ3P7 ERIC REFERRAL SERVICE, RECODED/
                    RQ3P8 OTHER, RECODED/
                    RQ4 ERIC TYPE, RECODED/
                    ERICUSER ERIC USER/
                    RQ12B DOCUMENT NUM, RECODED/
                    RQ14 OTHER TIMES YOU HAD QUESTIONS, RECODED/
                    RQ16 AGE, RECODED/
                    RQ17 DEGREE, RECODED/
                    RQ18 EMPLOYER STATUS, RECODED/
                    RQ19 GREATEST TIME SPENT, RECODED/
                    RQ20 INCOME, RECODED/
                    RQ6 HOW LEARNED OF ERIC, RECODED/

     VALUE LABELS   RQ2P1 TO RQ2P18 (1)NOT AWARE (2)AWARE BUT NO CONTACT
                                    (3)HAVE CONTACTED (9)NO RESPONSE/
```

```
                       NOT
           RQ3P1 TO RQ3P8 (1)AWARE (2)AWARE BUT NO CONTACT
                     (3)USED (9)NO RESPONSE/
           RQ4 (1)RIE (2)CIJE (3)ERIC COMPUTER SEARCH
              (4)ERIC MICROFICHE (5)ERIC PRINTED DOC
              (6)OTHER (7)NOT APPLICABLE
              (8)DON'T KNOW OR NO RESPONSE/
           RQ6  (1)TEACHER OR EMPLOYER
           (2)FRIEND  (3)LIBRARY, ETC. STAFF
           (4)SELF SEARCH  (5)OTHER
           (7)NOT APPLICABLE (9)NO RESPONSE/
           ERICUSER (1)YES (2)NO/
           RQ12B (1)1-5 DOCS (2)6-10 DOCS (3)11-20 DOCS
               (4)MORE THAN 20 DOCS (7)NOT APPLICABLE
               (8)DON'T KNOW (9)NO RESPONSE/
           RQ14 (1)NONE (2)1 OR 2 TIMES (3)3-5 TIMES
              (4)6 OR MORE TIMES (7)NOT APPLICABLE
              (8)DON'T KNOW (9)NO RESPONSE/
           RQ16 (1)UNDER 35 (2)35 TO 44 (3)45 TO 54
              (4)55 AND OVER (9)NO RESPONSE/
           RQ17 (1)ASSOCIATE DEGREE OR LESS (2)BACHELOR'S DEGREE
              (3)MASTER'S DEGREE (4)MASTERS + POSTGRD WK
              (5)DOCTORATE (6)OTHER AND NO RESPONSE/
           RQ18 (1)COLLEGE OR UNIVERSITY (2)STATE GOVT AGENCY
              (3)LOCAL SCHOOL DISTRIC (4)ELEMENTARY SCHOOL
              (5)SECONDARY SCHOOL (6)OTHER OR NO RESPONSE/
           RQ19 (1)ADMINISTRATION (2)RESEARCH OR EVALUTN
              (3)TEACHING OR COUNSELG (4)INFORMATION SUPPORT
              (5)STUDENT (6)OTHER OR NO RESPONSE/
           RQ20 (1)$35,000 OR MORE (2)$30,000 TO $34,999
              (3)$25,000 TO $29,999 (4)$20,000 TO $24,999
              (5)$15,000 TO $19,999 (6)$10,000 TO $14,999
              (7)$5,000 TO $9,999 (8)UNDER $5,0000
              (9)NO ANSWER/

LIST CASES CASES=376/VARIABLES=ALL
FREQUENCIES GENERAL=ALL

SAVE FILE  ERICEDP2

FINISH
```

APPENDIX F
COMPUTERIZATION OF THE RIE COST MODEL

On the follwoing pages we display the initial write-up for the computerization of a model for calculating the cost for providing access to Resources in Education. While we had to abandon this approach because of the limitations of the database and its structure (i.e., SPSS is set up for survey analysis and it would have been necessary to impute for many missing values in order to implement this model), this is an example of an approach which might be taken in the future to further analyze this database.

Computerization of the RIE Cost Model

As part of our analysis of ERIC system costs, we computerized the calculation of access point costs for providing access to Resources in Education (RIE). The reader should note that these costs reflect the provision of access and do not reflect other RIE-related costs such as document abstracting and indexing, database preparation, printing, and distribution. Our goal was to examine costs incurred by the access points in their provision of RIE to individual requestors, exclusive of any training activities which might be conducted at the access point level.

The computation facilities of SPSS were used in developing this cost model. While SPSS is a general purpose statistical package, it does not possess the same facilities for modelling as would, for example, special software designed specifically for simulation and modelling. Because of this, we have made certain simplifications and estimates in procedures which are outlined below. We present the details of computation here as an example of the further analysis which might be conducted of the data in the Access Point Screener Survey database.

Purpose of RIE Cost Model

To determine the total annual cost of subscribing and providing access to RIE, and to (a) disaggregate this cost by type of ERIC access point, and (b) calculate a unit cost per access point for RIE.

Model Components

The components for the RIE Cost Model are the following:

TOTCOST = ACQPROC + USERSUP + SUBPRI + OH

where

TOTCOST = Total cost

ACQPROC = Annual labor cost for acquiring and processing monthly or semi-annual RIE

USERSUP = Annual labor cost for providing user support services

SUBPRI = Adjusted price for subscribing to monthly or semi-annual RIE

OH = Administrative overhead cost, excluding fringe benefits, pension, hospitalization, and other labor overhead items.

Description of Input Variables

ACQPROC

ACQPROC = ((AxG)+(BxH))

where

A = the number of monthly RIE subscriptions received by the access point (variable Q2P1A from the Access Point Screener Survey questionnaire), set to zero (0) if this variable has missing data.

G = estimated annual unit labor cost for acquiring and processing the monthly RIE. Source: site visits to ERIC access points conducted during October and November of 1980. Values:

$13.12 for ERIC Clearinghouses and Facility
$ 8.18 for Academic Access Points
$16.83 for Other Access Points

B = the number of RIE semi-annual subscriptions received by the access point (variable Q2P1B), set to zero (0) if this variable has missing data.

H = estimated annual unit cost for acquiring and processing the semi-annual RIE. Values used:

$ 2.17 for ERIC Clearinghouses and Facility
$ 1.83 for Academic Access Points
$ 4.04 for Other Access Points

USERSUP

USERSUP = J

where

J = the summation of the hours of RIE user support per month times the hourly rates of each, from Section 8 of the Access Point Screener Survey (Q8P1A1A, Q8P1B1A, Q8P1C1A, Q8P1D1A, Q8P1E1A, Q8P1A2A, Q8P1B2A, Q8P1C2A, Q8P1D2A, and Q8P1E2A) times 12 (to annualize the monthly data provided in the screener). When the Section 8 values were missing, average values were calculated and inserted as follows:

Employee Category	ERIC Clearinghouses & Facility		Academic Access Points		Other Access Points	
	Hourly rate	Hrs. per month	Hourly rate	Hrs. per month	Hourly rate	Hrs. per month
a) Information professional	$11.73	18.08	$11.04	9.40	$ 9.38	11.92
b) Education professional	$13.15	8.25	$11.01	1.20	$19.48	1.52
c) Other professional	$12.60	17.70	$ 7.95	0.25	$ 5.92	1.56
d) Technical or clerical	$ 8.35	15.46	$ 4.08	5.63	$ 5.66	0.79
e) Student employees	$ 4.10	8.00	$ 2.71	6.07	$ 0.00	0.00

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey, 1981

SUBPRI

SUBPRI = ((AxE)+(BxF))

where

A = the number of monthly RIE subscriptions received by the access points (Q2P1A)

E = estimated adjusted subscription price for the monthly RIE, based on the fact that GPO supplies 1022 free subscriptions to Federal Depository Libraries. Source: the adjusted monthly RIE subscription price derived using the following formula:

$$\text{Adjusted Price} = \frac{(\text{Total subscriptions} - 1022) \times \$42.70}{\text{Total subscriptions}}$$

Values:

0 for ERIC Clearinghouses and Facility

$28.39 for Academic and Other Access Points

B = the number of semi-annual RIE subscriptions received by the access points (Q2P1B)

F = estimated adjusted subscription price for the semi-annual RIE, based on the fact that GPO supplies 1022 free subscriptions to Federal Depository Libraries. Source:

$$\text{Adjusted Price} = \frac{(\text{Total subscriptions} - 1022) \times \$15.00}{\text{Total subscriptions}}$$

Values:

0 for ERIC Clearinghouses and Facility

$ 6.19 for Academic and Other Access Points

OH (overhead)

OH = K((AxG)+(BxH)+J)

where

K = the administrative overhead rate applied to salaries plus fringe benefits. Source: site visits to ERIC access points conducted during October and November 1980 and data on overhead rates available from Clearinghouses.

Values:

31% for clearinghouses

54% for Academic and Other Access Points

(AxG)+(BxH) = the total labor and labor-related overhead associated with RIE (monthly and semi-annual) acquisition and procession.

J = labor-related user support costs

Calculation of Unit Costs

Unit costs (RIEUNIT) for providing RIE are calculated as follows:

RIEUNIT = TOTCOST ÷ RIEREQ

where

TOTCOST = Total access point cost, as calculated above

RIEREQ = Number of times per year RIE is consulted by staff, calculated as 12 x Q2P3, where Q2P3 is from the Screener questionnaire and equals the number of times per month that RIE is consulted by access point staff for their own use or in response to individual users' requests. When Q2P3 is missing from a Screener, its value is imputed by inserting the following average figures, derived from the Access Point Screener Survey:

1.	ERIC Clearinghouses & Facility	304 per mo.
2.	Academic Access Points	30 per mo.
3.	Other Access Points	8 per mo.

The Database Used for Calculations

All Access Point Screener Survey questionnaire respondents received identical questionnaires with the exception of Section 8 which was "rotated". That is, only those organizations sampled from the RIE subscriber list were asked for user support time and hourly rates for RIE by employee category; only those organizations sampled from the CIJE subscriber list were asked about CIJE; and so on.

Of the initial 1,063 Screener questionnaires mailed out, 267 received the Section 8 devoted to RIE. One-hundred fifty-six responses were received and analyzed from this category. Of these 156 questionnaires, 144 supplied Section 8 data for hourly rates and user support hours for RIE, as follows:

Type of Access Point	A. Number of Access Points in Population which Subscribe to RIE	B. Number of RIE Access Points Supplying Section 8 Data	C. Weighting Factor (A ÷ B)
1. ERIC Clearinghouses & Facility	17	17	1
2. Academic Access Points	1,566	72	21.75
3. Other Access Points	1,125	55	20.45
Total	2,708	144	Not Calculated

SOURCE: King Research, Inc., ERIC Cost and Usage Study, Access Point Screener Survey & Cost Analysis, 1981

The weighting factor, C, was applied to "blow back" the survey-observed values to the total values so that the total across all three access point types would more closely approximate the true totals.

APPENDIX G
WEIGHTING CALCULATIONS

In this appendix we give the methods used for calculating the weights for the access point screener survey and the requester survey.

Access Point Screener Survey

The access point screener survey presented a problem because of the overlap of information collected from a single questionnaire. It is noted that the questionnaire used for the screener survey collected data about several categories of ERIC information products and services provided by the respondent organization, plus training and publishing activities. This presented a problem in making estimates of total cost and usage, since some organizations were chosen from one list (e.g., RIE subscribers) but they also reported cost and usage data related to other ERIC information products and services (i.e., CIJE, online search or documents). In fact, because of the overlap, we did not know the total number of access points even though we knew the total number of access points that handle each of the specific ERIC information products and services.

In order to cope with the overlap problem we derived an equation which provides an initial estimate of the number of access points, cost and usage for each level of overlap. For example, we will be sampling from six lists as follows:

(1) RIE subscribers
(2) CIJE subscribers
(3) Directory of ERIC Search Services
(4) EDRS deposit accounts
(5) EDRS demand order customers
(6) Standing order customers from the Directory of ERIC Microfiche Collections

There are $\sum_{j} {}_6C_j$ (where $j = 1, 2, \ldots, 6$) mutually exclusive and exhaustive combinations of overlap that must be computed independently in order to estimate the total number of access points as well as cost and usage data.

The general equation used for estimation of totals from the 63 combinations of overlapped strata is:

$$X = \sum_{h} \frac{\sum_{i} N_i \sum_{j} X_{ij}}{\sum_{i} n_i}$$

where: (1) X is the estimated total for the entire population across h strata: $h = 1, 2, \ldots, 63$

(2) N_i is the total access points found in the ith list: $i = 1, 2, \ldots, 6$

(3) n_i is the number of sampled access points from the ith list: $i = 1, 2, \ldots, 6$

(4) X_{ij} is the jth observation (e.g., cost, usage, or 0, 1 for access point) from the samples taken from the ith list: $i = 1, 2, \ldots, 6$ and $j = 1, 2, \ldots, n_i$

In the example below we have observed the number of access points that receive and/or handle each of the four ERIC information product and service categories. Here $\sum_{ij} X_{ij}$ is merely the number of access points observed in the ith overlapped stratum. In the screener survey, the $\sum_{ij} X_{ij}$ could be number of requests, cost or other such observed variable.

Requestor Survey

The requestor survey presented a different kind of problem concerning calculation of weights. The requestor survey consisted of requestors who made requests that were:

(1) Assisted by access point staff members,
(2) Performed by the access point staff, and
(3) Performed by the requestor without assistance.

In this instance we wanted to take advantage of the fact that we had estimates of the total (annual) staff and assisted requests made in each of the sampled access points and, hence, good estimates of the population totals of number of requests. Using this knowledge the weights were calculated by the following ratio estimation method:

Assisted Request Weight (within an access point) =

$$\frac{T_a}{\sum_i T'_{ap(a)}} \quad \frac{T'_{ap(a)}}{r_a}$$

where: (1) T_a is the estimate of total requests that are assisted by access point staff

(2) $T'_{ap(a)}$ is the specified annual number of requests from the ith access point (summed over actual reponses). The estimate is adjusted by $(n_a/n_a + n_s)$ where n_a is number of assisted requests and n_s is number of staff requests (reported on the primary survey request card)
(For document requests the adjustment was $[n_a/n_a + n_s + n_u]$)

(3) r_a is the number of assisted requests responded to from the ith access point (requestor survey questionnaire)

Staff Request Weight (within an access point) =

$$\frac{T_s}{\sum T'_{ap(s)}} \quad \frac{T'_{ap(s)}}{r_s}$$

where: (1) T_s is the estimate of total requests by staff by access point

(2) $T'_{ap(s)}$ is the specified number of requests from the ith access point. The estimate is adjusted by $(n_s/n_a + n_s)$ where n_a and n_s and defined above

(3) r_s is the number of staff requests responded to from the ith access point

It is noted that the above method for calculations of weights provide an automatic means of accounting for non-responses and for missing items on responses.

The means of estimating weights for unassisted requests has a further complication in that we do not have estimates for the population totals for the number of unassisted requests. However, we do have an estimate of the annual number of unassisted, assisted and staff requests for the access points chosen in the survey (i.e., from the access point follow-up survey). Utilizing these data, we came up with the following equation for calculating weights to use for unassisted requests. This equation is as follows:

Unassisted Request Weight (within an access point) =

$$\frac{T_s}{\sum T'_{ap(u)}} \quad \frac{T'_{ap(u)}}{r_u}$$

where: (1) T_u is the estimate of total requests that are unassisted

(2) $T'_{ap(u)}$ is the specified annual number of requests from the ith access point. The estimate is adjusted $(n_u/n_a + n_s)$ where n_u is number of unassisted requests reported on the primary survey request card

(3) r_u is the number of unassisted requests responded to from the ith access point (requestor survey questionnaire).

The total number of weights calculated for the requestor survey is as follows:

	Assist.	Unassist.	Staff	Total
RIE				
CL	11	3	2	16
AC	10	1	3	14
Other	1	2	2	5
	22	6	7	35
CIJE				
CL	7	2	2	11
AC	8	5	-	13
Other	3	2	4	9
	18	9	6	33
Searches				
CL	15	1	3	19
AC	41	2	4	47
Other	12	3	2	17
	68	6	9	83
Doc's				
CL	14	5	-	19
AC	22	10	3	35
Other	5	1	2	8
	41	16	5	62
TOTAL	149	37	27	213